

Survey of Cia-Cia and closely related languages of southern Buton Island, Indonesia

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ABSTRACT

This paper presents the results of a dialect survey of the Cia-Cia language of southern Buton Island in Southeast Sulawesi, Indonesia. This survey also encompassed the closely related Kumbewaha and Lasalimu languages, that is to say, all three languages belonging to the Butonic branch of the Muna-Buton group of languages. The principal results of this survey are as follows: (a) the Cia-Cia language comprises two primary dialect areas, a western dialect and a central-eastern dialect complex; (b) the small (and previously undocumented) Wasambua lect is recognized as a third, outlier dialect; (c) Kaisabu is elevated to the status of a separate language; (d) Kumbewaha is more dialectally complex than has previously been recognized; (e) the unity of the Butonic subgroup within Muna-Buton is confirmed.

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1 Introduction

Cia-Cia is spoken in the southern part of Buton Island, Southeast Sulawesi, Indonesia. It is also spoken on the southern half of Binongko Island in the Tukang Besi (Wakatobi) archipelago, and on the small island of Batu Atas in the middle of the Flores Sea. Heretofore there has existed no definitive statement on the number of Cia-Cia dialects. Previous proposals have ranged from two dialects to nine dialects to even three separate languages.

Donohue (2004:33) proposed that Cia-Cia shares its closest linguistic affinities with Kumbewaha and Lasalimu, two small, underdescribed languages spoken along the coast of Buton Island to the east and north of Cia-Cia.

Given the lack of consensus regarding the dialect situation in Cia-Cia, and the paucity of data on Kumbewaha and Lasalimu, in August and September of 2015 we conducted a dialect survey of southern Buton Island. In total we collected word lists from twenty-seven locations, including Kumbewaha and Lasalimu. We also used a sociolinguistic questionnaire and gleaned further information from informal conversations with respondents.

This paper is arranged as follows. Section 2 is a review of the previous literature on Cia-Cia dialects. In this section we also discuss the history of research on the Kumbewaha and Lasalimu languages. Section 3 is an overview of the survey and how it was executed. Section 4 presents our lexicostatistical analysis of twenty-seven word lists and what lexical similarity scores indicate about how these lects are related to each other in a network of languages and dialects. Section 5 presents selected lexical isogloss maps. Section 6 is a discussion of sound changes, one of which defines the Butonic subgroup, and others which crosscut the Butonic languages. Section 7 presents our conclusions. Here we combine perspectives from synchronic lexicostatistics and historical sound change along with native speaker intuitions to present the first truly comprehensive picture of the dialect situation in Cia-Cia.

2 Previous research

In this section we review the previous literature on Cia-Cia dialects. We also review published research on the Lasalimu and Kumbewaha languages. Prior to our survey this amounted to little more than two word lists each.

2.1 Proposals concerning Cia-Cia dialects

No less than ten previous researchers or research teams have investigated and reported on the dialect situation in Cia-Cia. Most authors fail to document the basis on which they made dialect distinctions. Conversely, Konisi and Hidayat (2001) document the basis for their bipartite division, but fail to clarify the boundaries of their two dialect areas.

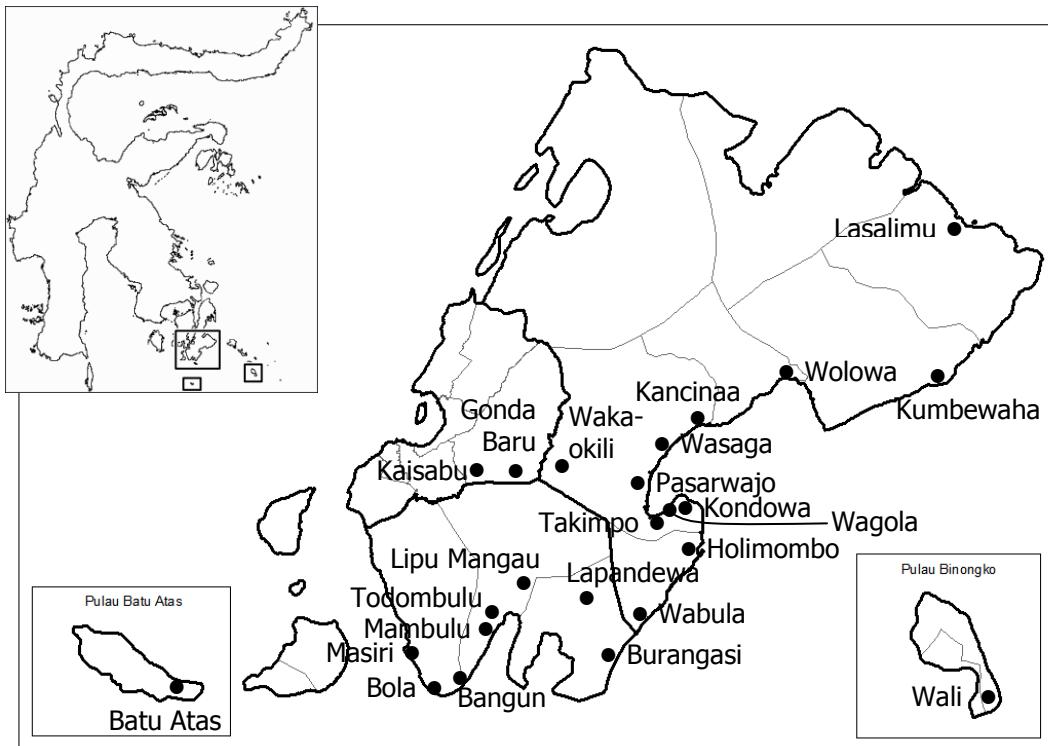


Figure 1. Map of Southern Buton showing the location of selected towns and villages.

The map in Figure 1 locates certain places that come up in the discussions of Cia-Cia dialects. We provide this map to help the reader track the following discussions. Our aim is to present each proposal fairly in its own terms. Given the strikingly different views encompassed by these proposals, we do not attempt a synthesis. Indeed, one cannot even assume that these researchers would delimit Cia-Cia the same way.

2.1.1 Two dialects: Konisi (1999) and Konisi & Hidayat (2001)

Konisi (1999:6) and Konisi and Hidayat (2001:10–11) recognize two dialects:

- (a) a costal dialect (*dialek pesisir*) characterized by the retention of the phoneme *r* (e.g. *rato* ‘arrive’ < PMP **dateŋ* ‘arrive’);

- (b) an interior dialect (*dialek pedalaman*) in which *r* has shifted to a uvular fricative, which the authors write as *gh* (e.g. *ghato* ‘arrive’), with subsequent re-introduction of /r/ in loan words, e.g. *roti* ‘bread,’ *radio* ‘radio.’

The topic of Konisi’s research, Cia Liwungau, is a variety of the interior dialect. The official name of the village where Cia Liwungau is spoken is Lipu Mangau.

In his preliminary investigation of Cia-Cia phonology and grammar, Van den Berg (1991c) also encountered two dialects, which he labeled ‘dialect A’ (respondent from Lapandewa village in Kecamatan Sampolawa) and ‘dialect B’ (respondent from Gonda village in Kecamatan Pasarwajo). However he also made note of this same isogloss feature: “In dialect B, /r/ is phonetically realized as a voiced velar or uvular fricative” (1991c:308). However, in the speech of Van den Berg’s respondent, this also held true of loan words, e.g. [kamaya] ‘room’ < Malay *kamar*.

In contrast Hanan (2013:72) outlines four different realizations of *r across the Cia-Cia and Kumbewaha area, namely *r* (voiced apico-alveolar trill), *R* (voiced uvular fricative), *X* (voiceless uvular fricative), and glottalization (never fully explained but written as *r'* word initially and as *V'V* between vowels). Hanan also discusses the fact that *w*, ordinarily a bilabial semivowel, is realized as a voiceless bilabial fricative *ɸ* in Gonda Baru (Hanan 2012:90 ff.; 2013:73). She does not mention, however, how many Cia-Cia dialects are to be recognized. We return to these sound changes below in section 6.

2.1.2 Two dialects: Bhurhanuddin 1979

Bhurhanuddin (1979:50) reported two dialects of Cia-Cia, each with various subdialects.

- (a) Sampolawa¹
 - Mambulu
 - Laporø
- (b) Wabula
 - Wabula
 - Burangasi
 - Wali
 - Takimpo
 - Kondowa
 - Holimombo

Bhurhanuddin does not explicitly state the basis for his conclusions, and unfortunately does not report similarity scores between Cia-Cia lects but only between Cia-Cia and certain other languages.

¹ In print Bhurhanuddin wrote ‘Mawasangka,’ an obvious error. Mawasangka is a subdialect of Southern Muna.

In fact since he collected only six word lists, one must wonder how he concluded that Cia-Cia comprised eight subdialects. In partial answer to this question, it appears that Bhurhanuddin was reacting to a prior source, *Monografi Daerah Sulawesi Tenggara* (1975), that had reported eight dialects (see § 2.1.7). In light of this report Burhanuddin wanted to clarify that only two dialects needed to be recognized.

In a further twist, Bhurhanuddin presented Kaisabu (in his spelling: KaEsabu) as a Cia-Cia word list, but failed to include it later in his presentation of Cia-Cia dialects and subdialects. In fact Kaisabu is unmentioned in all subsequent reports except in Andersen's inventory of the languages of Southeast Sulawesi, where he presents it (without discussion) as a separate language (Andersen 2006:6).

When we peruse Bhurhanuddin's Cia-Cia data (lists from Mambulu, Lapor, Kaisabu, Wabula, Burangasi and Wali) (1979:34–36), we encounter no examples of an *r* ~ *gh* correspondence, but only several lexical items where all lists have *r* (e.g. 11. *doruo* 'two'; 24. *roo* 'leaf'; 29. *rea* 'blood'; 53. *poroku* 'drink'; 66. *pingkora / kora* 'sit'; 84. *moriri* 'yellow'). This need not imply any duplicity, since according to Van den Berg this variation is noncontrastive, and perhaps was not noted by Bhurhanuddin in his transcription.

2.1.3 Two dialect areas: Nazar, Machmoed and Nurlatif (2014)

Although by its title this paper purports to be an historical-comparative study, the two dialect groups arrived at by Nazar, Machmoed and Nurlatif (2014) were based on a lexicostatistical analysis. The authors took as their starting point the nine dialects identified by Abdullah et al. (1991) (see § 2.1.10 below). However it should be noted that by doing so, they limited themselves geographically to the area covered by the (then) Pasarwajo district, not the entirety of the the Cia-Cia language area.

Within the confines of their study, they identified two dialects. Roughly, Lilowiwoka² is a 'northern' dialect and Tahowaka is a 'southern' dialect.

- (a) Lilowiwoka
 - Lapodi
 - Lapor
 - Wakaokili
 - Wolowa
 - Wasaga-Kancinaa
- (b) Tahowaka
 - Takimpo
 - Holimombo

² Lilowiwoka is blended from Lapodi, Lapor, Wakaoliki, Wolowa and Kancinaa, similarly for the name Tahowaka. It is not made clear from which village the authors' Lapor data was obtained. Names and locations of the other subdialects can be found on the map included in Abdullah et al. (1991:92).

Wabula
Kondowa

Besides the limited geographical coverage, there are additional reasons for not accepting their results uncritically. First, their methodology produced only bifurcating branches, so it was a foregone conclusion that, at the highest level, they would identify only two dialect groups. Second, the similarity scores on which they construct a tree model are in many cases so close in range as to not be statistically significant. Third, even when accepting their data as presented, it is possible to construct alternate trees with less distortion. For example Wolowa scores highest in similarity (85%) with Wabula and Holimombo, and could have been joined to the southern dialect area—except perhaps out of some desire to maintain geographical continuity. This short paper does not include any of the primary data on which the authors based their analysis.

2.1.4 Three languages: Donohue (2004)

Donohue (2004:33, Figure 4) presents an internal classification of the Muna-Buton languages. Under his ‘Buton’ node, he indicates a bipartite division. His ‘East Buton’ group comprises Kumbewaha and Lasalimu, while under his ‘West Buton’ node he distinguishes three varieties, which he treats as distinct languages.

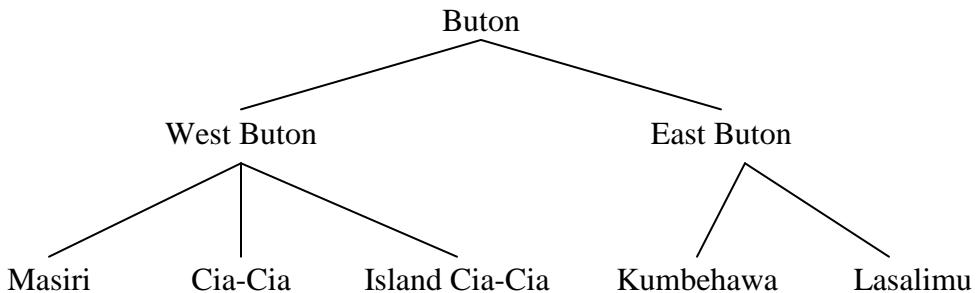


Figure 2. Internal relationships of the Butonic subgroup following Donohue (2004).

Although not stated explicitly, by ‘Island Cia-Cia’ Donohue meant the Cia-Cia variety spoken on the southern part of Binongko Island. In other discussions this variety is usually termed ‘Wali’ (after the name of a village where this variety is spoken). No basis for Donohue’s divisions is given. Instead he leaves this as a topic “for a later, more detailed discussion of the Muna-Buton languages” (2004:32).

2.1.5 Three languages: Kaseng et al. (1983) and (1987)

The authors of *Pemetaan Bahasa-Bahasa di Sulawesi Tenggara* collected 200-item Swadesh word lists from Masiri, Wabula, and ‘Cia-Cia’ (we will refer to this last variety as Pasarwajo, since that is where their informant was from). Based on a lexicostatistical analysis that they performed on this data, they concluded that all three word lists

represented separate languages. Figure 3 gives the lexical similarity values calculated by these authors.

Masiri	
48.5	Pasarwajo
45	75 Wabula

Figure 3. Selected lexical similarity values from Kaseng et al. (1987:83, 86)

However, because of the strict criteria they employed in order for two responses to be considered the ‘same,’ overall their similarity scores generally fall well below what other researchers have found. For example, René van den Berg (1991a:47) calculated Masiri and Cia-Cia (from Sampolawa) to be 93% lexically similar.

From the above matrix it is clear that, even on their own terms, Masiri was the most lexically divergent of their three lists. Furthermore Masiri scored significantly higher with Wolio than their other two word lists:

- Masiri – Wolio : **46%** lexically similar
- Wabula – Wolio : 31% lexically similar
- Pasarwajo – Wolio : 28% lexically similar

This suggests that the Masiri lect—or at least the speech of their Masiri respondent—has been relatively more influenced by Wolio than the two other varieties. Compared with Muna, differences were not significant.

- Masiri – Muna : 33.5% lexically similar
- Wabula – Muna : 31.5% lexically similar
- Pasarwajo – Muna : 29% lexically similar

2.1.6 Three dialect groups: Alirman (2010)

We have not been able locate a copy of Alirman’s paper presented at the 2010 *Kongres Internasional Bahasa-Bahasa Daerah Sulawesi Tenggara* held in Baubau. However a summary is presented in Hanan’s doctoral thesis (2014:14–15). According to her summary, Alirman proposed three major dialect groups with various subdialects:

- (a) Ciacia Kapara’e
 - Tira, Lande and Sampubalo Wapulaka
 - Batuatas, Wapulaka, Burangasi, Pogalampa, Rano
 - Lapandewa group (Sempa-Sempa, Rongi, Kaindea, Kaongke-ongke and Tambunalo)
 - Todombulu, Saumolewa, Lapola

- Laporor group
 - Wakaokili
 - Wabula, Wolowa, Matanauwe
 - Lasalimu-Ambauau
 - Binongko
- (b) Ciacia Mbahae
 - Sampolawa (Mambulu, Katilombu and Uwebonto)
 - Wawoangi, Wawulaka, Makolona
 - Masiri, Honelalo
- (c) Ciacia Taina
 - Takimpo, Kondowa, Holimombo

Although partly conjecture on our part, it would appear that Ciacia Kapara'e encompasses lects which use *para'e* as their word for 'who?'; Ciacia Mbahae encompasses lects which use *mbahae* as their word for 'how?'; while Ciacia Taina encompasses lects which use *taina* as their word for 'no.'

2.1.7 Four dialects: *Ethnologue* 18th ed. (2015)

The 18th edition of the *Ethnologue* (Lewis, Simons and Fennig 2015) lists four Cia-Cia dialects, of which one, Wabula, has several subdialects. Locations where these dialects are spoken is not given.

- (a) Kaesabu
- (b) Sampolawa (Mambulu-Laporor)
- (c) Wabula
 - Wabula
 - Burangasi
 - Wali
 - Takimpo
 - Kondowa
 - Holimombo
- (d) Masiri

Their list is the same as Bhurhanuddin's (§ 2.1.2) with the addition of Kaesabu and Masiri.

2.1.8 Six dialects: Tanasale (1999)

Yoce Tanasale (October 2, 1999:pers.comm. to David Andersen) reports six dialects of Cia-Cia. These dialects are not based on quantitative evidence, but rather reflect an insider's view of the similarity or dissimilarity of the speech of different Cia-Cia villages.

The main dialects, Laporö and Lapandewa, are apparently based on clan or ethnic distinctions. People refer to *suku Laporö* and *suku Lapandewa*. The other dialect names are based on the names of the village or district (*kecamatan*) where the dialect is spoken.

(a) Laporö

Kec. Sampolawa: Desa Gunung Sejuk, Sandang Pangan (Dusun Katolemando, Hendea)

Kec. Pasar Wajo: Desa Wagola, Lapanda, Takimpo Lipugena, Banabungi, Pasar Wajo, Lapodi, Wasaga, Kancinaa, Wolowa

Kec. Sorawolio: Desa Karya Baru, Gonda Baru, Bugi

Kec. Lasalimu: Desa Sampuabalo

(b) Lapandewa

Kec. Sampolawa: Desa Batu Atas Timur, Wacuala, Batu Atas Barat, Tira, Bahari, Gerak Makmur, Gaya Baru, Lapandewa, Sandang Pangan (Dusun Rongi, Benteng)

Kec. Pasar Wajo: Desa Wasuemba, Wabula, Kondowa

Kec. Lasalimu: Desa Matanauwe

(c) Batauga

Kec. Batauga: Desa Masiri, Bola, Rano, Pogalampa

Kec. Sampolawa: Desa Bangun, Katilombu, Jaya Bakti

(d) Todombulu

Kec. Sampolawa: Desa Todombulu

(e) Wakaokili

Kec. Pasar Wajo: Desa Wakaokili

(f) Cia-Cia Kepulauan

Kec. Binongko: Desa Wali.

2.1.9 Eight dialects: Monografi Daerah Sulawesi Tenggara (1975)

We have not been able to obtain a copy of the 1975 publication *Monografi Daerah Sulawesi Tenggara*. However, on pages 67–68 the authors present a classification of Southeast Sulawesi languages, which is reproduced in Bhurhanuddin (1979:2–3). According to this classification, Cia-Cia has eight dialects:

- (a) Wabula
- (b) Sampolawa
- (c) Laporö
- (d) Takimpo

- (e) Kondowa
- (f) Holimombo
- (g) Watuata [Batu Atas]
- (h) Wali

2.1.10 Nine or ten dialects: Abdullah et al. (1991)

Abdullah et al. (1991:9) give nine or ten dialects. According to these authors, one of these dialects (or two of them) is nearly extinct, its speakers having switched to more prestigious dialects of Cia-Cia.

- (a) The Takimpo dialect used in the area around Pasarwajo and Takimpo.
- (b) The Wabula dialect, spoken in and around the villages of Wabula and Wasuemba; speakers have also spread to other villages.
- (c) The Holimombo dialect used in the area around Holimombo and Bagola villages.
- (d) The Kondowa dialect used only around the village of Kondowa.
- (e) The Lapor dialect used around Laponda village; speakers have also spread to other villages.
- (f) The Lapodi dialect used only in the area of Lapodi village.
- (g) The Wakaokili dialect used in the area of Wakaokili village.
- (h) The Wolowa dialect used in the area around Wolowa, Wasoga and Kancinaa villages.
- (i) The dialect(s) of Kancinaa and Wasoga; these nearly extinct dialects have been crowded out by other dialects that have entered the area, and only a few speakers remain.

The basis for making these dialect distinctions is not made clear, although the authors provide a small amount of sample data, namely the responses for ‘sweet potato,’ ‘banana,’ ‘walk’ and ‘go’ in the respective dialects (Abudullah et al. 1991:9).

Looking at their population figures and map of the research area, it appears that what they defined to be Cia-Cia was limited to the then Pasarwajo district (which at that time still included the present-day Wabula and Wolowa districts). Konisi and Hidayat (2001:11) are skeptical of their claims, and even dispute the correctness of the sample data that Abdullah and his coauthors provided.

2.2 Research on Lasalimu

The first linguist to collect information on the Lasalimu language was J. C. Anceaux in 1975. According to a lexicostatistical study that included thirty-two word lists from in

and around Muna and Buton islands, he concluded that Lasalimu (his ‘Language E’) related most closely to Wolio and Kamaru (Anceaux 1978). Figure 4 reproduces a portion of his table of percentages of shared cognates (Anceaux 1978:280).

A (Wolio)			
67	H (Kamaru)		
50	68	E (Lasalimu)	
56	54	64	C (Cia-Cia)

Figure 4. Selected lexical similarity values from Anceaux (1987:280).

Looking at patterns of historical sound change, Donohue (2004) in fact argued for the *removal* of Wolio and Kamaru from the Muna-Buton group (and we concur). At best the pattern of lexical similarity scores observed in Figure 4 might suggest a chaining relationship: Wolio and Cia-Cia lie at the ends of a dialect chain, Kamaru and Lasalimu in the middle. However even this interpretation is not supported by our own data and lexicostatistical analysis (§ 4.4).

These results notwithstanding, the notion of a close relationship between Kamaru and Lasalimu has persisted in certain circles. In both the first and second editions of *Bahasa dan Peta Bahasa di Indonesia* (Pusta Bahasa 2008, Tim Pemetaan Bahasa 2017:129), Lasalimu and Kamaru are presented as dialects of a single language. Firman (2016, 2017) includes not only Lasalimu and Kamaru but also nearby Pancana lects within his ‘Lasalimu-Kamaru language,’ despite consistently low lexical similarity scores. A Lasalimu-Kamaru language defined in this way is simply incompatible with Donohue’s (and our) view of language relatedness, namely Lasalimu is a Butonic language, Pancana is a Munic language, and Kamaru is to be removed from the Muna-Buton group altogether.

Anceaux’s Lasalimu list can be found in a collection of his Southeast Sulawesi word lists that was published posthumously (Anceaux 2016). Four years after Anceaux’s research trip the Indonesian linguist B. H. Bhurhanuddin published a 100-item Lasalimu word list, but left Lasalimu unclassified among Muna-Buton languages (Bhurhanuddin 1979:40–42, 47).

In the early 1990s Mark Donohue collected two Lasalimu lists of around two hundred and five hundred words. While he used this information to develop a picture of the classification of languages of the Muna-Buton area (Donohue 2004), the lists themselves were not published.

2.3 Research on Kumbewaha

During the course of his fieldwork on Wanci Island in the Tukang Besi archipelago, in the early 1990s Mark Donohue made a side trip to Buton Island to collect word lists from various locations, including Kumbewaha and Lasalimu. In contrast to Anceaux, Donohue saw a close connection between Kumbewaha, Lasalimu and Cia-Cia (Donohue 2004:33), but he did not elaborate the basis for his classification. A small amount of Kumbewaha data appears in Donohue's paper itself, while 186 items from his word list have been incorporated as part of the online LexiRumah database (Kaiping, Edwards and Klamer 2019).

A 200-item Kumbewaha word list with typographical errors is included in Lauder et al. (2000). A small amount of Kumbewaha data can also be gleaned from Hanan's papers (2012, 2013) on sound changes in the Cia-Cia area. In these papers Hanan assumes Kumbewaha to be a dialect of Cia-Cia.

3 Survey procedure

3.1 General scope and conduct of the survey

A proper study of Cia-Cia dialects would be worth a dissertation, and would include not only a full account of linguistic differences but also polities that existed under the Sultanate at Baubau, origin tales, recent migrations, and the cultural practices and celebrations whereby one group is distinguished from or united with another group.

By comparison the goals of this survey were modest: to gain an initial appreciation of the Cia-Cia dialect situation using the measures of lexical similarity (lexicostatistics) and historical sound change. We also set out to clarify the relationship between Cia-Cia and its sister languages Kumbewaha and Lasalimu.

To investigate lexical similarity and historical sound change we collected word lists. The standard word list used in most locations comprised 349 items. In selected locations we used the 814-item Sulawesi Long List.³ The reason for using the longer list was to have a fuller record of the local speech variety (lect) in question.

The 349-item list was prepared especially for the Cia-Cia survey. It includes all the items on the Austronesian Basic Vocabulary list, the Leipzig-Jakarta list, and the Swadesh 100, 200 and 218 lists (except for a few items not relevant to the Indonesian context such as ice and snow). It also contained a number of additional items that were chosen

³ Subsequent to this survey, the Sulawesi Long List was expanded, and in its finalized version it comprises 844 items. See *Sulawesi Language Alliance*, s.v. "Survey Instruments: Sulawesi Umbrella Wordlist and the Sulawesi Long List" <http://sulang.org/resources/survey-instruments#wordlists> (accessed August 3, 2017).

specifically to inform us about the distribution of certain sound changes across the Butonic languages.

Based on previous reports concerning Cia-Cia dialects (§ 2.1), we prepared a list of fifteen locations to collect word list data. The survey commenced on August 8th, 2015 and ended on September 7th. By then a total of twenty-seven word lists had been elicited. See Figures 5 and 7 below for the location of word list elicitation sites. Even so, it was not possible to follow up on every report that the next village down the road had a different *logat* ‘accent’ than the one next to it. Some corners had to be cut; part of the field portion of the survey was figuring out which ones. In hindsight twenty-seven word lists were probably too few, and we should have collected a handful more (§ 7.2).

3.2 Calculation of lexical similarity scores

The starting point for our lexicostatistical comparison was the 218-item Swadesh list (Samarin 1967:220). This list was chosen to make our results comparable with other Sulawesi surveys. The data we collected would also allow a different set of words to be used, or even to compare results using different standards (e.g. Swadesh versus Austronesian Basic Vocabulary versus Leipzig-Jakarta), but we leave this for a future study.

When calculating lexical similarity scores, some items on the 218-item Swadesh list were excluded, and others modified for the Indonesian context.

The items ‘freeze,’ ‘snow,’ and ‘ice’ were not elicited as these terms are not relevant to the tropics. The items ‘clothing,’ ‘dance,’ and ‘spear’ were not elicited as experience has shown that local languages do not have a generic term, or if they do it is invariably borrowed from Indonesian.

The following substitutions were made as being more appropriate in the Indonesian context (see further Martens 1989):

- ‘brother’ → ‘older sibling’
- ‘sister’ → ‘younger sibling’
- ‘claw’ → ‘fingernail’
- ‘in’ → ‘inside’
- ‘leg’ → ‘thigh’
- ‘stick’ → ‘wood’
- ‘warm’ → ‘hot (water)’

In the context of this survey we also eliminated the following items, for the stated reason:

- ‘husband’ (overlap with responses for ‘man, male’)
- ‘wife’ (overlap with responses for ‘woman, female’)
- ‘lake’ (collected for too few varieties; few lakes are present in this geographical area)
- ‘rope’ (apparent synonyms including ropes made of various materials)

- ‘bark’ (overlap with responses for ‘skin’ and ‘tree’)
- ‘seed’ (overlap with responses for ‘bone’ and ‘stone’)
- ‘here’ (overlap with responses for ‘this’)
- ‘there’ (overlap with responses for ‘that’)
- ‘twenty’ (overlap with responses for ‘two’ and ‘ten’)
- ‘with’ (overlap with responses for ‘and’)
- ‘day’ (overlap with responses for ‘sun’)
- ‘hunt’ (various specific terms, e.g. hunt with spear, hunt with dogs, etc.)

These exclusions⁴ left an even 200 items to be compared between lists.

Comparisons were compiled and tallied using the WordSurv7 computer program. For each item, word forms were sorted into groups considered to be lexically similar. For this we modified an adaptation of the Blair Method developed by Noel Mann (Blair 1990; Mann and Markowski 2005). Two word forms were considered to be lexically similar if 50% of the segments were Category 1 and 75% of the segments were Category 1 or 2, as defined in Table 1. If a given word form A was lexically similar to any word form B for an item, word form A was considered to be in the same group as all other word forms lexically similar to word form B.

For the purpose of this study, a regular sound correspondence (Table 1, Category 1c) is defined as two phones that appear in the same position in the same item for at least 3 items in the data set.

Category 1	a. exact matches b. vowels differing by one feature c. a regular sound correspondence
Category 2	a. phonetically similar consonants b. vowels differing by two or more features
Category 3	a. non-phonetically similar consonants b. non-regularly occurring deletion
Ignored	a. supplemental semantic morphemes <ol style="list-style-type: none"> 1. verb morphology affixes 2. nominal morphology affixes 3. nouns that modify a head noun b. reduplication c. regularly occurring deletions

Table 1. Categories in the modified Blair Method.

⁴ We also excluded the Wasambua response for ‘dull,’ which translates as ‘not sharp.’

Note that similarity of two vowel segments was based on the number of features by which they differ. The varieties in this study have five-vowel systems for which only three features are necessary to distinguish vowel phonemes: high, low, and front. Because of this almost all pairs of vowels differ in only one or two features. The result is a slight overcount of lexical similarity for items with a small number of segments, particularly items with four or fewer segments containing at least two vowels.

A ‘rule of thumb’ used in some initial surveys is that lexical similarity scores below 80% can be taken to indicate separate languages (see among others Smith 1984; Grimes and Grimes 1987; Friberg 1987, 1991). Others have proposed 70% as a cutoff point: similarity scores below this value indicate lack of intelligibility, but not vice versa (Boone 2007). While the reader may wish to keep these cut-off values in mind as a reference point, it should be noted that we do not use lexical similarity scores to determine language boundaries. In fact apart from Lasalimu almost all of the similarity scores between survey word lists fall in the gray area between 60% and 90%, where intelligibility must be determined by other means (Grimes 1992). Lexical similarity scores, however, proved their worth in determining *relative* closeness between Cia-Cia lects.

4 Lexicostatistical analysis

At the heart of our survey results is a lexicostatistical analysis. Before proceeding to the detailed results, however, we start with a bird’s eye view. In order to best understand the languages and dialects of the survey area, a basic distinction must be made between the core Cia-Cia language area on the one hand (which itself is internally complex) versus what we term on the other hand the six outlier or ‘northern tier’ communities. From west to east the northern tier communities are Wasambua, Kaisabu, Kabawakole, Wolowa, Kumbewaha, and Lasalimu (see Figure 5).

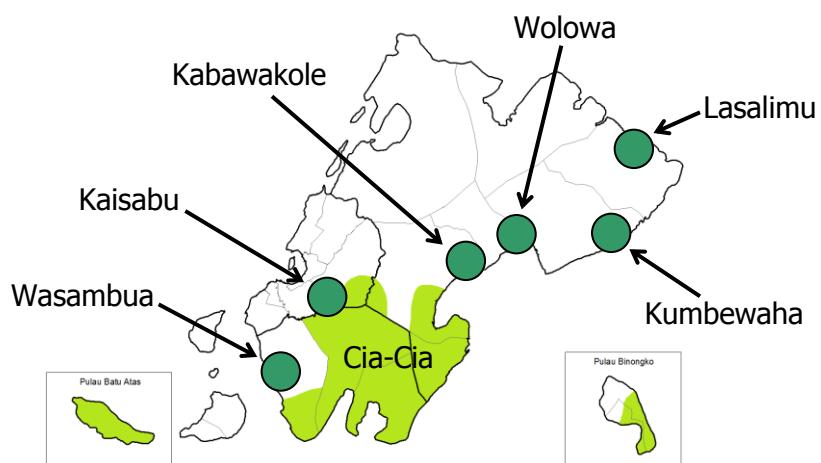


Figure 5. The six northern tier communities in relationship to the core Cia-Cia area.

The core represents an area that is heavily settled by Cia-Cia speakers. Some districts (*kecamatan*) are even said to be 100% Cia-Cia. This area has also been settled long enough for a complex dialect situation to develop in situ. When we turn to the northern tier communities, we also find long-standing language communities. In fact their distribution suggests that they represent the original inhabitants of their respective areas. However these areas later became subject to expansion by other groups, so that the northern tier lects now exist as remnant communities in a sea of more recent immigrants (see Appendix 2). Based on trends in language transmission as described below, it appears that their unique languages (or divergent dialects) will not survive beyond another fifty years. In terms of word stock and in some cases sound change, they are also less closely tied to the core Cia-Cia language area. We conclude that Wasambua is a dialect of Cia-Cia—albeit its most divergent dialect—while the remaining communities represent languages even more distant from Cia-Cia.

We present our survey results beginning with these northern tier communities before turning to a discussion of dialectal variation within the core Cia-Cia language area.

4.1 Wasambua

Wasambua is spoken in the village of Lakambau. Formerly Wasambua was spoken in an interior location, but in 1969 the Wasambua were resettled by the government to what at that time was a sparsely inhabited stretch of coastline in the southwest of Buton Island. As outsiders have moved into this area—primarily Cia-Cia from Batu Atas Island—the original Wasambua community has come to comprise only a single neighborhood (*dusun*) out of five in the village of Lakambau. Wasambua is spoken in no more than 130 households, and even then only by people in their thirties and older.

In our lexicostatistical analysis (see Figure 8 on page 20), Wasambua averaged only 72% lexically similar with all other core Cia-Cia dialects and subdialects (range 77% to 69%). It scored highest with the western dialect of Cia-Cia (77% lexically similar with Mambulu and Bangun; 76% with Bola; 74% with Masiri). While such low lexical similarity could suggest that Wasambua be considered a separate language, we found no such sentiments among our respondents. Whenever we spoke to them about the use, development, or steps to preserve the *bahasa daerah* (local language), to them that always meant the broader Cia-Cia community, of which Wasambua was a part. It appears that most Wasambua adults are also fluent in the Batu Atas dialect, while their children—along with the rest of the youth in Lakambau village—are shifting to Indonesian.

Our conclusion is that Wasambua should be considered a dialect of Cia-Cia. It is an outlier dialect that stands apart from both the western and central-eastern dialect clusters that make up the core of the Cia-Cia language area.

By way of documentation, we collected an 844-item word list along with further information on pronoun sets and deictics, and recorded and transcribed a brief text.

Results have been published in a paper titled “Wasambua word list, notes, and sample text” (Mead 2017c).

4.2 Kaisabu

Kaisabu is spoken in the eastern portion of the village (*kelurahan*) Kaisabu Baru, where they were resettled by the government from a more isolated location in 1969. It too exists in a very multilingual environment, with Cia-Cia communities immediately to their east, and Pancana- and Wolio-speaking communities to their west. Many Kaisabu speakers learn to speak some Cia-Cia and Wolio, but few outsiders bother to learn Kaisabu.

While Kaisabu is 74% lexically similar with Wasambua, it scores on average only 69% lexically similar with all other Cia-Cia word lists (range 72% to 66%). More important to us, however, are the reports we received from Cia-Cia communities that Kaisabu was not intelligible. In fact on a scale of easily understood to partially, slightly, or not at all understood, Kaisabu was consistently rated with the likes of Muna and Tukang Besi, *even in the Cia-Cia communities geographically closest to Kaisabu*.

Until our survey it was moot whether Kaisabu should be considered a dialect of Cia-Cia or a separate language. The lexicostatistical results combined with reports concerning inherent intelligibility from both inside and outside the Kaisabu community paint a consistent picture that Kaisabu should be regarded as a separate language.

Unfortunately this language is endangered. It is only being learned by children in households where both parents speak Kaisabu, and even then not always. When only one parent speaks Kaisabu, then Indonesian, or less often Wolio, becomes the language used at home. As a result, only 20% to 30% of children are learning Kaisabu. On the positive side, many adults recognize that their language is under threat, and some adults have committed to speaking just Kaisabu with each other. But the lack of intergenerational language transfer remains a threat.

By way of documentation, we collected an 814-item word list, along with further information on pronoun sets and deictics. Results have been published in a paper titled “Kaisabu word list and notes” (Mead 2017a).

4.3 Kabawakole, Wolowa and Kumbewaha

Kumbewaha is spoken in three geographically discontinuous villages. These are ‘remnant’ villages where the language still survives, surrounded by Cia-Cia who have migrated here locally; by Javanese and Balinese transplanted here by the Indonesian government; and most recently by people fleeing the sectarian violence that occurred in Ambon around the year 2000. From east to west these three communities are:

Kumbewaha (*kecamatan* Siotapina S 05° 24.320' E 123° 06.013'). The language is still being learned by children in Kumbewaha village.

Wolowa Baru (*kecamatan* Wolowa S 05° 23.621' E 122° 58.736'). In Wolowa Baru the language is spoken by children of junior high school age and above; that it is not known by younger children seems to be primarily the result of a particular teacher who went around the village insisting that children must come to school knowing Indonesian.

Kabawakole village (*kecamatan* Pasarwajo S 05° 26.202' E 122° 53.979'). All reports indicate that these people formerly inhabited Wakole (= present-day Matawia S 05° 24.189' E 122° 57.637'), a sister village to Wolowa Baru, but during a time of sickness and death sometime after Indonesian independence, they abandoned this village. A portion sought their fortune in the Moluccas, while another portion relocated to Tana Maeta, which now comprises a neighborhood (*dusun*) of Kabawakole village. Here the language is spoken only by those forty and over, in a very multilingual environment.

In all three locations, the word stock of the local language has been considerably eroded by Indonesian as well as Cia-Cia. Word list elicitation sessions in general proved difficult, as people struggled to remember the *asli* (original) terms in distinction to the borrowed Indonesian and Cia-Cia terms in use in everyday speech.

Kumbewaha scores relatively low in lexical similarity vis-à-vis the core Cia-Cia lects (average 66%, range 61% to 70%) and Kaisabu (64%). Kumbewaha is listed as a separate language in the current edition of the Ethnologue, and during the course of this survey we found no evidence to suggest revising that status.

Figure 6 presents the picture when Wakole and Wolowa are added to the mix. Note that lexical similarity scores reported in the Cia-Cia column are *averaged* values representing twenty-one different word lists.

Cia-Cia		
79	Wakole	
70	87	Wolowa
66	78	82 Kumbewaha

Figure 6. Percentages of lexical similarity between Cia-Cia, Kabawakole, Wolowa and Kumbewaha (this survey).

Under normal circumstances this pattern would be indicative of a chaining relationship, that is to say, each speech community shares its highest lexical similarity scores with its neighbors. To wit:

Cia-Cia – 79% – Wakole – 87% – Wolowa – 82% – Kumbewaha

This may be the case. However, not only was our Wakole respondent bilingual in Cia-Cia, but we also have reasons to suspect that the Kabawakole list included responses that are reflective of Cia-Cia rather than bona fide Wakole (Mead 2017d:2). This would have the effect of artificially raising the similarity of the Kabawakole word list with Cia-Cia while lowering it vis-à-vis Wolowa and Kumbewaha.

Given that we have more confidence in the Wolowa word list—and here we see a clear difference, 82% lexically similar with Kumbewaha, versus 70% lexically similar on average with Cia-Cia—it seems prudent at this time to consider Wolowa and Wakole to be dialects of Kumbewaha.

By way of documentation, 814-item word lists were collected in all three locations, along with further information on pronoun sets and deictics in Kumbewaha. This information has been separately published (Mead 2017b,d).

4.4 Lasalimu

The Lasalimu language is spoken in a single village, Lasalimu Pantai. This language is clearly endangered. Fluent speakers are all in their forties or older. Adults in their twenties and thirties also speak a version of Lasalimu, but without full command and with considerable lexical replacement from Indonesian. Children and teenagers do not speak the language, having at best only a passive knowledge of it.

Lasalimu scores relatively low in lexical similarity even with other Butonic languages.

Cia-Cia – Lasalimu	:	57% lexically similar (range 54% to 59%)
Kaisabu – Lasalimu	:	56% lexically similar
Kumbewaha – Lasalimu	:	68% lexically similar (range 64% to 73%)
Kamaru – Lasalimu	:	54% lexically similar
Wolio – Lasalimu	:	50% lexically similar

We found no evidence to back up a chaining relationship with Kamaru (§ 2.2). Conversely the data indicate that the dialect chain extending from Cia-Cia into Kumbewaha (§ 4.3) continues into Lasalimu:

Cia-Cia – 79% – Wakole – 87% – Wolowa – 82% – Kumbewaha – 73% – Lasalimu

However a *single* lexical similarity score in the low seventies is hardly enough to consider Lasalimu to be a dialect of Kumbewaha. We propose that Lasalimu continue to be regarded as a distinct language, just as it is in the current edition of the Ethnologue.

By way of documentation, we collected an 814-item word list, along with further information on pronoun sets and deictics. Results have been published separately in a paper titled “Lasalimu word list and notes” (Mead 2018).

4.5 Dialects of the core Cia-Cia area

Having looked at the northern tier dialects and languages (§ 4.1 through 4.4), we now turn to the core of the Cia-Cia language area. For the core area we collected word lists in twenty-one locations: nineteen from the mainland, one from Batu Atas Island, and one from Wali village on Binongko Island. See Figure 7.

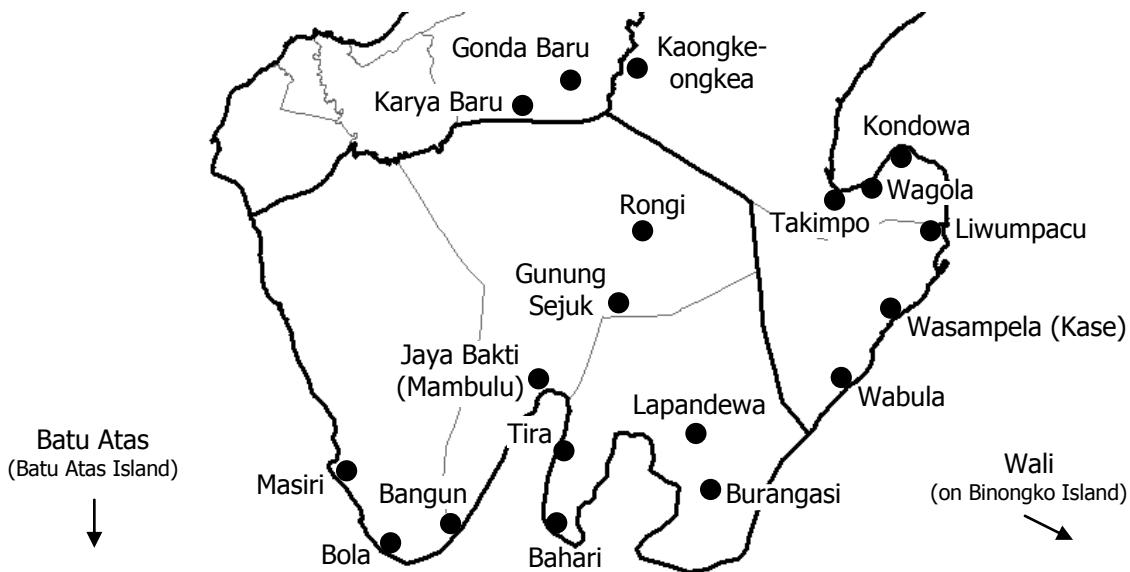


Figure 7. Word list elicitation locations for the core Cia-Cia area.

The results of our pair-wise comparison of these word lists are presented in Figure 8. This matrix includes similarity scores calculated pair-wise for all the word lists we collected, along with comparisons with five outside languages (Kamaru, Wolio, Muna, Tukang Besi, and Kulisu).

As is standard in such presentations, we have permuted the matrix so that higher values appear closer to the diagonal. In order to help the reader more easily apprehend the picture presented by the data, we have employed shading from dark green to light blue to indicate greater or lesser degree of lexical similarity.

The principle result of this study is that the core Cia-Cia language area divides into a western dialect, represented by the Masiri, Bangun, Bola, and Mambulu lects, and a central-eastern dialect complex represented by the other lects. Internally the word lists representing the western dialect exhibit a high and narrow range of lexical similarity (85% to 90% lexically similar compared to each other), whereas outside of this group they score significantly lower (average 78%)—although Bola and to a lesser extent Mambulu exhibit a slight degree of convergence toward some of the central-eastern lects (at 85% lexically similar, Bola – Batu Atas is the highest among these scores).

	rng	koo	lap	gnd	kry	gsj	wab	lwp	wag	knd	tak	kas	bat	bah	tir	bur	wal	bol	mbl	bng	mas	was	kai	wkl	wlw	kmb	llm	kdt	smn	mun	tbw	tbb	kls	kmr	wol				
Rongi	100	88	84	86	85	83	84	84	83	84	82	81	82	82	83	78	78	76	76	74	71	70	78	68	64	57	51	48	52	51	43	45	43	47					
Kaongkeongkea	88	100	86	85	84	83	82	82	81	80	79	80	82	83	84	82	77	78	76	76	72	71	72	78	72	67	58	51	47	50	50	42	43	43	46				
Lapandewa	84	86	100	86	88	86	86	86	83	86	86	84	86	88	88	87	86	81	80	77	75	69	68	82	69	68	56	52	47	50	51	43	46	42	49				
Gonda Baru	86	85	86	100	94	91	86	85	86	87	84	84	83	85	85	82	80	78	77	77	71	68	80	70	66	57	54	49	52	51	42	45	44	50					
Karya Baru	85	84	88	94	100	93	88	86	87	86	85	83	85	86	84	84	82	78	78	76	71	68	82	70	66	58	52	47	51	51	42	46	44	49					
Gunung Sejuk	83	83	86	91	93	100	84	85	84	84	83	82	85	84	85	82	80	78	76	74	69	66	78	69	64	58	50	46	49	52	43	44	44	50					
Wabula	84	82	86	86	88	84	100	90	87	87	85	84	84	82	84	84	81	78	76	74	71	68	80	70	66	54	53	48	50	49	42	43	42	46					
Liwumpacu	84	82	86	85	86	85	90	100	91	90	88	84	86	84	86	84	80	78	77	73	70	68	83	72	68	58	52	47	50	54	45	46	43	46					
Wagola	83	81	83	86	87	84	87	91	100	92	88	86	84	82	84	84	83	80	77	73	73	71	69	82	71	66	56	54	51	52	52	46	47	42	48				
Kondowa	84	80	86	87	86	84	87	90	92	100	90	88	86	82	87	84	85	80	80	75	74	70	70	82	72	68	57	53	50	52	53	46	48	42	48				
Takimpo	82	79	86	84	85	83	85	88	88	90	100	86	86	84	86	85	81	80	76	74	72	69	83	72	69	57	53	51	52	52	45	48	43	47					
Kase	81	80	84	83	82	82	84	84	86	88	86	100	84	80	86	83	82	78	78	73	72	69	66	79	69	68	56	52	49	50	52	46	45	44	48				
Batu Atas	81	82	86	84	85	85	84	86	84	86	86	84	84	86	84	86	88	85	83	80	75	74	67	80	70	68	59	53	48	52	52	46	47	41	48				
Bahari	82	83	88	83	86	84	82	84	82	82	84	80	90	100	91	87	88	84	82	80	74	70	68	80	70	68	58	52	48	50	50	44	47	41	48				
Tira	82	84	88	85	86	84	84	86	84	84	87	86	86	90	91	100	90	90	84	84	80	78	73	68	82	72	70	59	54	51	52	52	44	45	41	47			
Burangasi	83	82	87	85	84	85	84	84	84	84	84	84	84	84	84	84	86	87	90	100	88	82	86	79	77	71	68	80	68	66	58	52	48	51	52	42	45	39	46
Wali	78	77	86	82	84	82	81	84	83	85	85	82	88	88	90	88	100	84	80	77	74	70	68	80	68	67	56	52	48	52	52	47	46	40	46				
Bola	78	78	81	80	82	80	78	80	80	80	81	78	85	84	84	82	84	100	89	86	85	76	72	78	70	66	58	52	56	52	44	48	43	54					
Mambulu	76	76	80	78	78	78	76	78	77	80	80	78	83	82	84	79	80	89	100	90	87	77	70	76	68	66	58	60	56	58	52	46	47	47	54				
Bangun	76	76	77	77	78	76	74	77	73	75	76	73	80	80	80	77	77	86	90	100	87	77	68	72	65	62	56	58	53	56	52	44	44	46	50				
Masiri	74	72	75	77	76	74	74	73	73	74	74	72	75	74	78	77	74	74	85	87	87	100	74	70	71	66	62	56	61	55	60	51	44	42	45	56			
Wasambua	71	71	69	71	71	69	71	70	71	70	72	69	74	70	73	71	70	76	77	77	74	100	74	68	67	61	57	59	52	59	53	43	44	42	52				
Kaisabu	70	72	68	68	68	66	68	68	69	70	69	66	67	68	68	68	72	70	68	70	74	100	70	70	64	56	60	53	60	51	44	44	45	54					
Wakole	78	78	82	80	82	78	80	83	82	82	83	79	80	80	82	80	80	78	76	72	71	68	70	100	87	78	64	57	51	53	54	48	47	46	49				
Wolowa	68	72	69	70	70	69	70	72	71	72	72	69	70	70	72	68	68	70	68	65	66	67	70	87	100	82	68	54	49	52	53	46	45	46	49				
Kumbewaha	64	67	68	66	66	64	66	68	66	68	69	68	68	68	70	66	67	66	62	62	61	64	78	82	100	73	49	48	48	54	48	46	47	50					
Lasalimu	57	58	56	57	58	54	58	56	57	57	56	59	58	59	58	56	58	56	56	56	57	56	64	68	73	100	47	44	44	50	43	44	54	50					
Kadatua	51	51	52	54	52	50	53	52	54	53	53	52	53	52	54	52																							

Internal relationships within the central-eastern complex are not easily captured in a single statement. Patterns of lexical similarity scores reveal both clustering and chaining. In fact we have already indicated some clusters in Figure 8 using thick black lines. These clusters, discovered through lexicostatistics, also correspond to geographic regions.

Cluster 1 : Tira, Bahari, Burangasi, Wali, and Batu Atas (coastal areas of Lapandewa district, also includes the two island locations)

Cluster 2 : Kase, Takimpo, Kondowa, Wagola, Liwumpacu, and Wabula (all of these villages are along the Pasarwajo coast)

Cluster 3 : Gunung Sejuk, Karya Baru, and Gonda Baru (mouth of the Sampolawa River and points interior)

Cluster 4 : Lapandewa, Rongi, and Kaongkeongkea (interior villages that lie on an almost direct north-to-south line; this is the ‘loosest’ of the four clusters and perhaps should not be recognized)

These clusters are illustrated graphically in Figures 9 and 10, which are clique analyses. In a clique analysis, all of the speech varieties within a circle relate to each other at or above the specified percentage of lexical similarity. At a very high percentage of lexical similarity, each word list would be isolated in its own clique, while at a low percentage of lexical similarity all word lists would fall within a single clique. Such diagrams would of course be unrevealing. However it is usually possible to hit upon lexical similarity values which are particularly revealing of patterns of relationships. In the present case, Figure 9 is a clique analysis at 90% lexical similarity. At this value we see the first three clusters emerge from the data, as it were. (The Kase, Lapandewa, Kaongkeongkea, and Rongi word lists do not relate to any word list at or above 90%, therefore they are not included within any circle.)

Figure 10 is a clique analysis at 88% lexical similarity. By dropping the percentage of lexical similarity just two points lower, the clusters are more solidified, and the fourth cluster emerges for the first time (represented by the circle which encompasses Kaongkeongkea and Rongi). We can now also observe the chaining which broadly characterizes the central-eastern dialect area, although the clique containing Kaongkeongkea and Rongi stands apart from any other clique. It would link to other cliques when the percentage of lexical similarity is dropped to 86%. Similarly a link between the central-eastern and western dialect areas (not shown) would be achieved only if the percentage of lexical similarity were dropped to 85%.

Ideally the speech varieties in a clique analysis would be positioned in a way that at least roughly corresponded to their geographic locations in the real world. This has not been possible with the Cia-Cia lects. Especially notable about Figure 10 is the link between Wabula and Gunung Sejuk, even though these communities are not geographically close to each other.

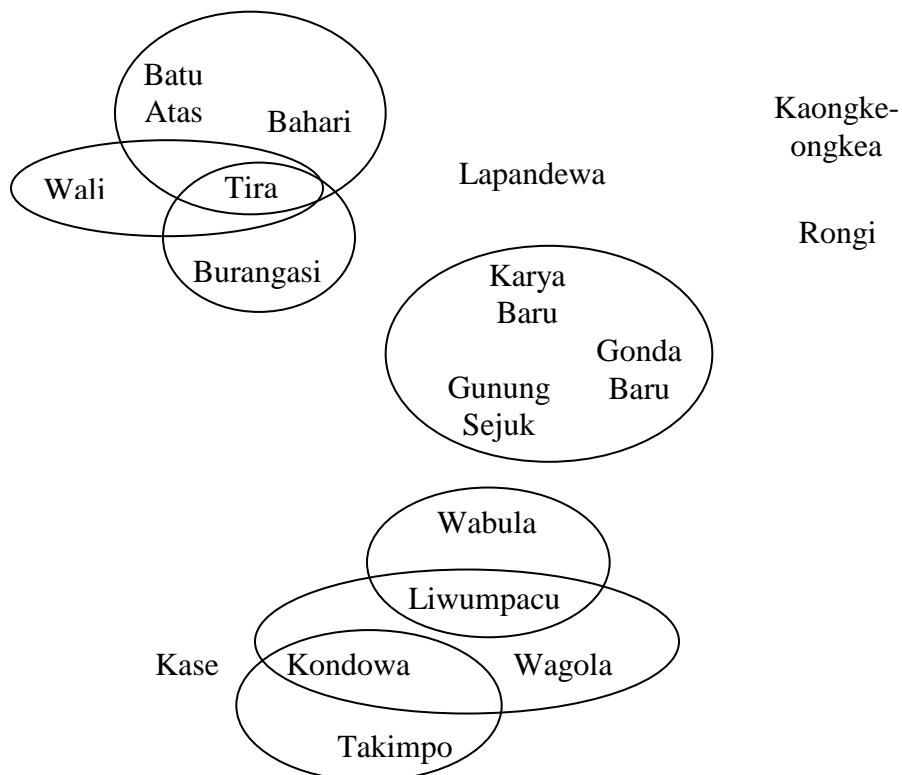


Figure 9. Clique analysis of central-eastern lects at 90% lexical similarity.

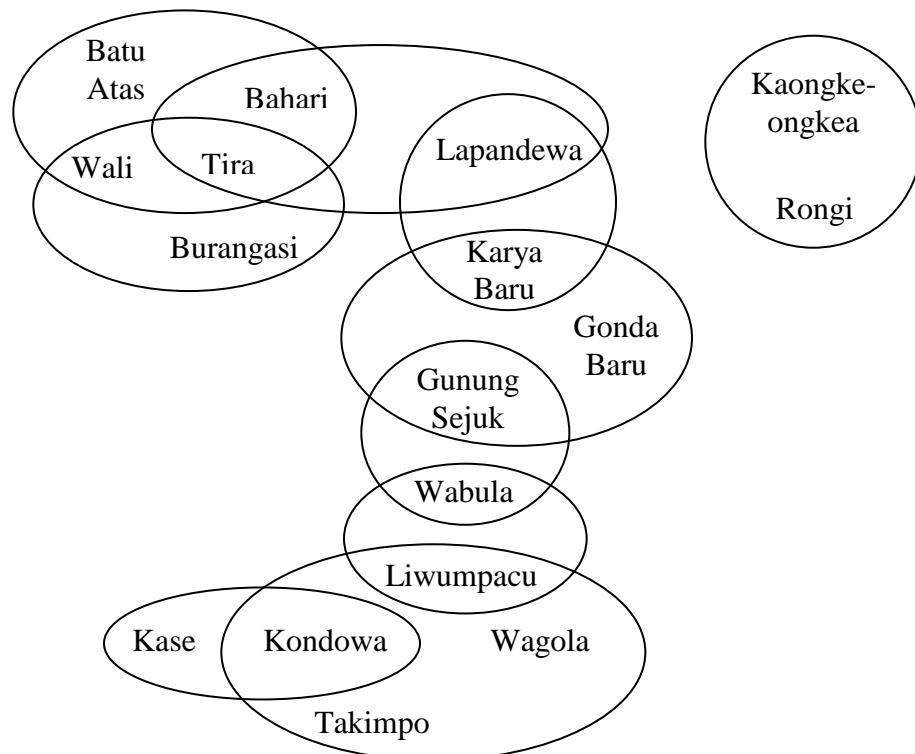


Figure 10. Clique analysis of central-eastern lects at 88% lexical similarity.

5 Lexical isogloss maps

During the process of collecting word lists in Cia-Cia, Kaisabu, Kumbewaha, and Lasalimu, we encountered two words for ‘cat’: in some locations cats are known as *beka*, in other locations they are called *mbuta*. One of the things we can do with this information is map all the locations where *beka* is used and all the locations where *mbuta* is used—see Figure 11 below—and then draw a line which separates these two geographic areas. In linguistics the line that separates them is called as isogloss (or isogloss line). In this case, it would specifically be a lexical isogloss because it demarcates the area where a word is used.

In this section we present lexical isogloss maps for selected word list responses. Of all the maps we could have prepared—after all, we elicited more than three hundred lexical items in each location—Figures 11 through 15 are simply a few of the maps that we found interesting. In particular we have avoided maps where the same word is used in all lects, and maps which would likely be inaccurate because we didn’t sufficiently control the response (e.g. we asked for the word for ‘fence’ but people use different words depending on the type of fence). In the preceding section we quantified the lexical data. In these maps we move away from numbers and percentages in order to give the reader a feel for what those numbers mean practically when it comes to actual words and speaking the language. Finally, it should be noted that these maps are all based on a small number of data points and could be refined by collecting information in more locations.

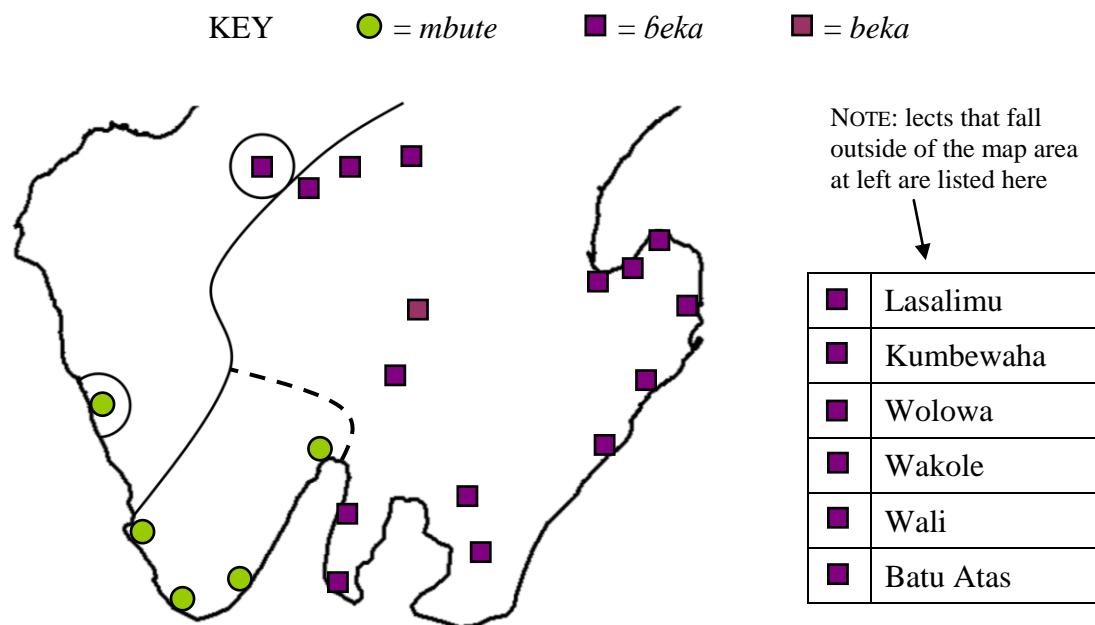


Figure 11. Lexical isogloss map for ‘cat’ (word list no. 086).

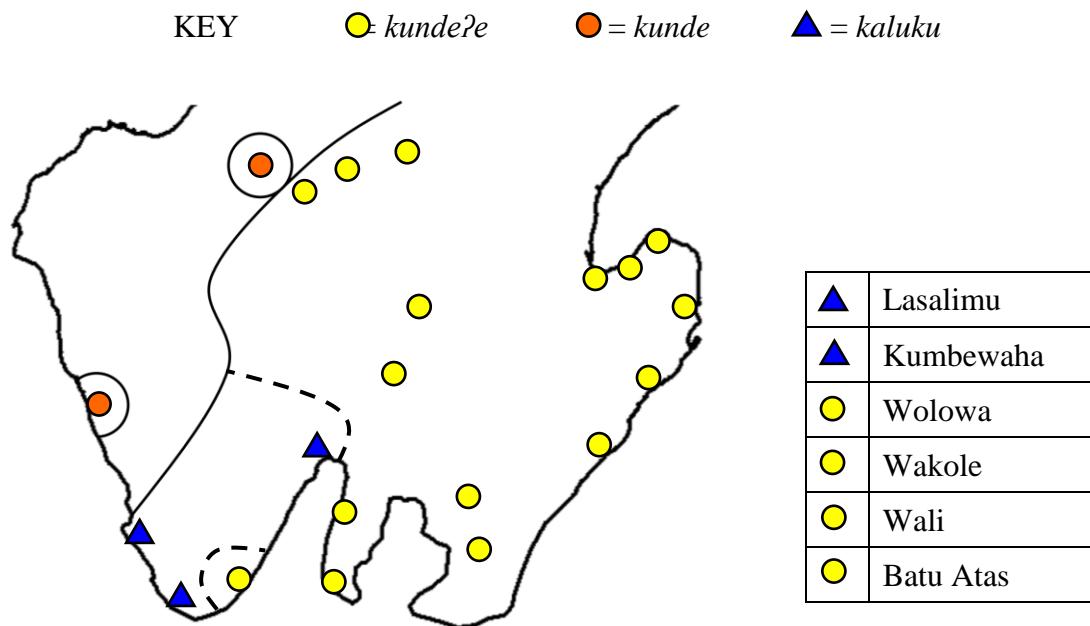


Figure 12. Lexical isogloss map for ‘coconut’ (word list no. 099).

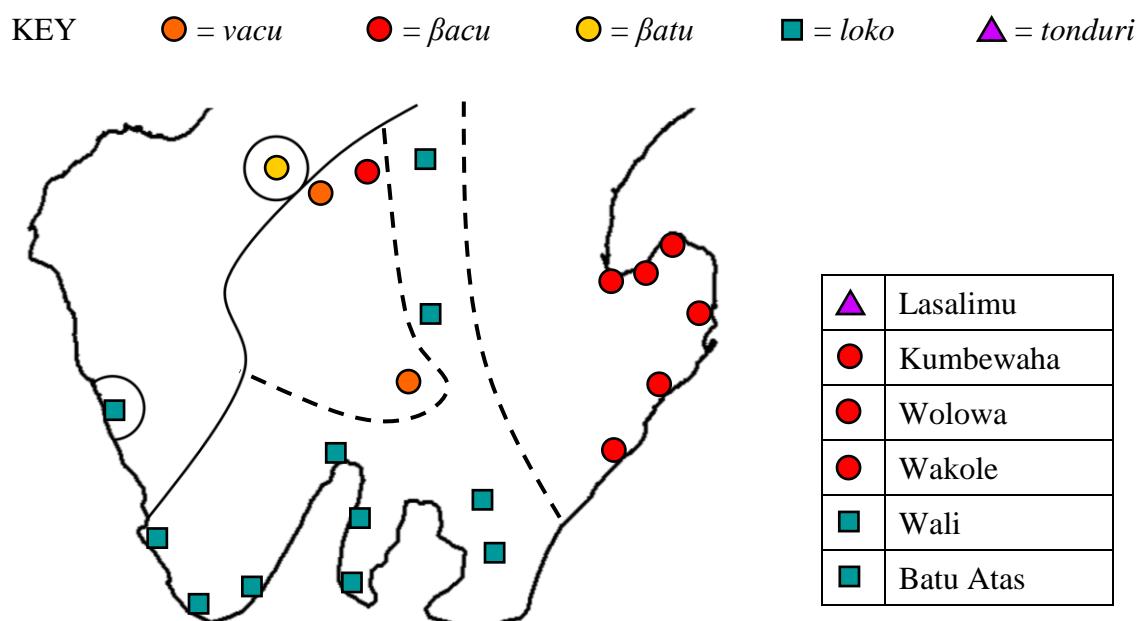


Figure 13. Lexical isogloss map for ‘stone’ (word list no. 138).

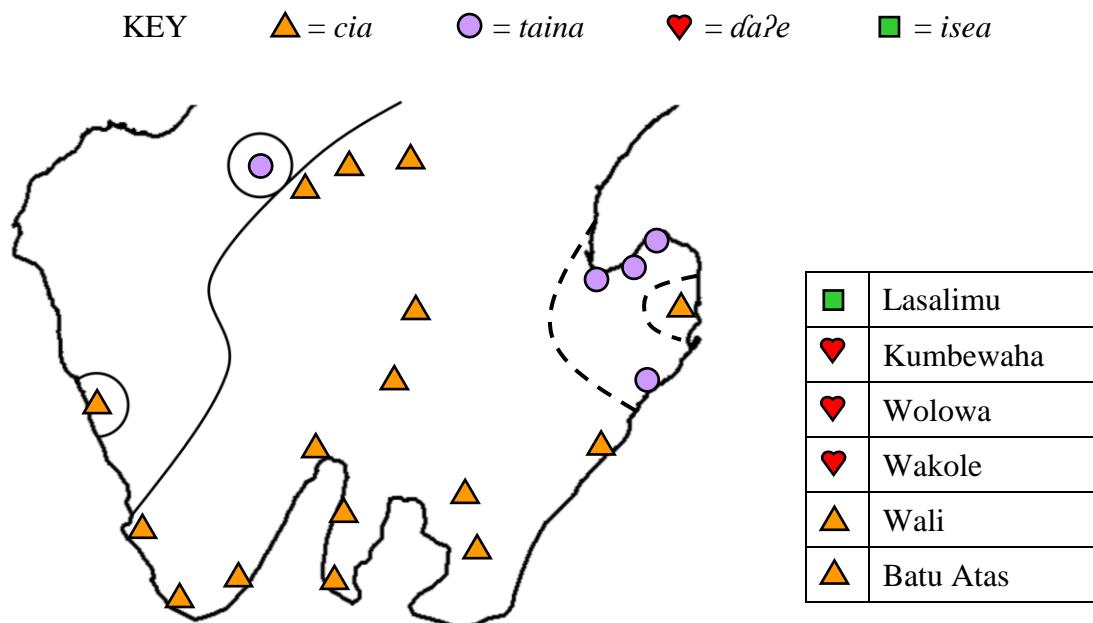


Figure 14. Lexical isogloss map for ‘no’ (word list no. 207).

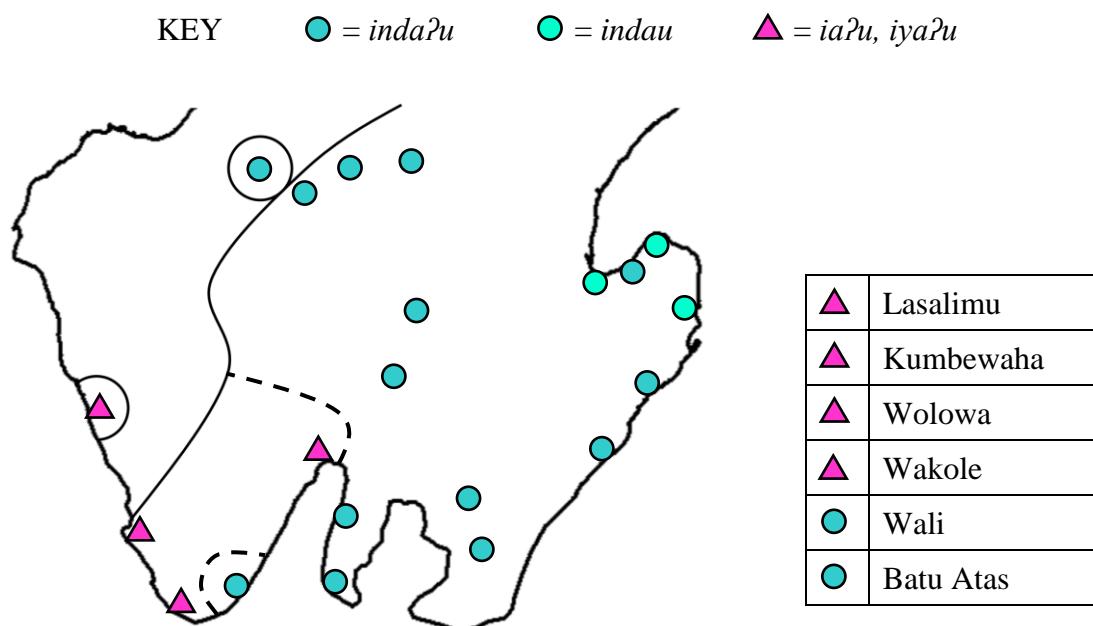


Figure 15. Lexical isogloss map for ‘I’ (word list no. 055).

6 Notes on sound change among Butonic languages

In this section we discuss several sound changes that are significant for the Butonic languages. Although these changes happened historically, they have resulted in consistent differences between lects which can be observed today, and could be mapped in much the same way as lexical isoglosses were in the preceding section. These sound change isoglosses are important for a Cia-Cia dialect geography. In some cases these sound changes may also present challenges for orthography development.

The first sound change discussed below concerns the fate of the proto phoneme *q in Butonic languages. As this sound change is exhibited by all lects, it is significant for establishing the Butonic branch as a valid genetic group. Other sound changes crosscut the Butonic languages. The other sound changes discussed here are the shift of *t to an affricate; the shift of *r to a back fricative; the loss of *l; the shift of *h to glottal stop or zero; and the intercalation of glottal stop between like vowels.

6.1 *Split of *q*

The Proto Malayo-Polynesian (PMP) phoneme symbolized as *q is thought to have been a voiceless back velar (probably uvular) stop (Blust 1990:233). In most areas of Western Malayo-Polynesian, PMP *q is realized as glottal stop or zero. However it survived as a distinct phoneme in initial and medial position in Proto Muna-Buton (PMB). Outside of the Butonic group its reflexes in present-day languages are:

- a uvular fricative in Muna (written as *gh*);
- *h* in Busoa, Kambowa, and Kaimbulawa;
- zero word initially and glottal stop word medially in Southern Muna, Pancana, Kioko, and Liabuku.

Among Butonic languages we find a split: in some words PMP *q is realized as *k* in all four languages, while in another set of words *q is realized as *h* in Kaisabu, Cia-Cia, and Kumbewaha, and as zero (via *h*) in Lasalimu. See respectively the top and bottom halves of Table 2. Italics indicate a replacement (non-cognate) form, while an em-dash indicates lack of data. The word list number corresponds to the numbering system used in Appendix 2. Proto Muna-Buton (PMB) reconstructions are mostly from Van den Berg (2001), although a few are our own.

For the most part we can explain these different reflexes by assuming that *q became *k preceding *i, *u and *e, but became *h preceding *a (with the initial consonant of *kake < *qaqe ‘foot’ explained as regressive assimilation). Preceding *o there is a mixed pattern.

PMP	PMB	Kaisabu	Cia-Cia	Kumbe-waha	Lasalimu	meaning	word list no.
*quhuŋ	*quu	kuu	ku?u	ku?u	ku?u	'mushroom'	108
*quay	*que	<i>xauxo</i>	kue	kue	kue	'rattan'	103
*quləj	*qule	kule	kule	kule	kule	'snake'	077
*quzan	*qusa	<i>hise</i> (<Busoa)	kia	<i>monda</i>	<i>monda</i>	'rain'	121
*qulu	*qulu	—	kulu	—	—	'head' (classifier)	—
*qubi	*qubi	kuβi	<i>santa</i>	kuβi	kuβi	'yam'	—
*qə(n)tut	*qotu	<i>tebuu</i>	kocu	kocu	kocu	'pass gas'	324
*qatəluR	*qotolu	tikolu	cikolu	cikolu	<i>ontolu</i> (<Wolio)	'egg'	068
*qaqay	*qaqe	kake	kake	kake	kake	'foot'	026
*taqi	*taqi	taki	taki	taki	taki	'feces'	039
*paqit	*paqi	mopaki	mopaki	mopaki	mopaki	'bitter'	181
*ma-qitəm	*moqito	mokito	mokito	mokito	<i>mokilo</i>	'black'	203
*laqia	*loquia	lokia	lokia	lokia	lokia	'ginger'	104
*puqun	*puqu	pepuku	pepuku	pipuku	pepuku	'begin'	—
*taqun	*taqu	taku	taku	βaha	taku	'year'	245
*tuqah	*tuqa	motuka	mocuka	<i>molejo</i>	<i>molejo</i>	'old'	—
*baqəRu	*boqou	βokou	βokou	βokou	βoko?u	'new'	168
*tuqəD	*tuqo	<i>katumpu</i>	<i>katumpu</i>	<i>katumpu</i>	cuko	'stump'	—
*bituqən	*wituqo	<i>kalipopo</i>	βicuko	βicuko	<i>mpio-mpio</i>	'star'	115
*qabu	*qabu	habu	habu	habu	awu	'ashes'	136
*qatay	*qate	hate	hate	hate	ate	'liver'	035
*qatəp	*qato	hato	hato	hato	<i>kotowo</i>	'roof'	114
*qajəŋ	*qayo	heo	haeo	ŋaeo	ŋao	'charcoal'	149
*qazay	*qase	hase	hae	ŋaxe	adə	'chin'	016
*qalipan	*qalipa	<i>molalano</i>	holipa ~ honipa	holipa	lipa	'centipede'	074
*qaləjaw	*qoloyo	holeo	holeo	holeo	oleo	'sun'	113
*qapəju	*qopoyu	piu	hopiu	hopiu	<i>kampaki</i>	'gall'	036
PCel *qəli	*qoli	holi	holi	holi	βalu	'buy'	315
*qənay	*qone	hone	hone	hone	<i>komea</i>	'sand'	125
*maRuqanay	*moqane	mohane	mohane	mohane	moane	'male'	043
*daqan	*raqa	xaha	raha	xaxa	raa	'branch'	089
*paqa	*paqa	paha	paha	paha	paa	'thigh'	027

Table 2. Reflexes of PMP *q in Butonic languages.

The conditioned split of PMP *q into *k and *h observed in these data⁵ is not just rare, but unique among Malayo-Polynesian languages. We must assume that this sound change occurred once, that is, in the ancestor language shared by Cia-Cia, Kaisabu, Kumbewaha, and Lasalimu. This sound change affirms the genetic unity of Donohue's (2004) proposed Butonic branch.⁶

6.2 Shift of *t

The phoneme *t shifted to an affricate preceding high vowels *i and *u. This shift is attested in all lects except Kaisabu. The data in Table 3 is exemplary; additional examples can be gleaned from the word list responses in Appendix 4.

PMB	Kaisabu	Cia-Cia	Kumbe-waha	Lasalimu	meaning	word list no.
*titi	titi	cici	cici	cici	'breast'	023
*atiho	atiho	aciho	aciho	aciho	'sneeze'	—
*qanti	hanti	hanci	hanci	bara	'sweat'	041
*timpa	timpa	cimpa	cimpa	cimpa	'tusk'	—
*tumbu	tumbu	cumbu	ido	cumbu	'grow'	281
*tuu	tuu	cu?u	cu?u	cuu	'knee'	028
*pitu	pitu	popicu	popicu	popicu	'seven'	223
*Ratu	hatu	hacu	hacu	acu	'hundred'	229
*potu	potu	pocu	ke?e	ke?e	'head'	001
*watu	βatu	βacu	βacu	tonduri	'stone'	138
*kucu	tutu	cucu	kucu	kucu	'louse'	070

Table 3. Shift of *t > *c in Cia-Cia, Kumbewaha and Lasalimu.

⁵ We are also aware of three etyma—not shown in Table 2—where reflexes of *q follow neither pattern. These are: PMP *qasu 'smoke' > PMB *qahu > Cia-Cia *hau*, Kumbewaha and Lasalimu *ka?u* (Kaisabu has replacement form *humbo*; see word list no. 134); PMP *taqən > PMB *taqo > Kaisabu, Cia-Cia *taho*, Kumbewaha, Lasalimu *ta?o* (word list no. 303); and PMP *tuqu > PMB *kotuqu > Kaisabu *kotuhu*, Cia-Cia *kocuhu*, Kumbewaha, Lasalimu *tocu?u* (word list no. 201). These reflexes are unexplained in the current analysis.

⁶ A second change which unites the Butonic languages is the split of *k > *k, *s. Sibilant reflexes are seen for example in the pronouns *ikoo > *isoo (2SG), *ikami > *isami (1PL.EXCL) and *ikomiu > *isomiu (2PL) (see Appendix 3); in the applicative suffix *ako > *aso; in *kuhe > *suhe 'cuscus'; and in other forms. However as it requires comparison with the *k > *k, *s split which occurred in Muna *but under different conditioning environments* (Van den Berg 1991b:11–12), we leave the discussion of this change for the future.

Despite the near-universality of this change across lects (except Kaisabu) and throughout the lexicon, there are reasons to suppose that it may be an areal feature rather than an inherited characteristic. Consider the following lexemes:

- The word for ‘no’ (word list item 207) throughout most of the Cia-Cia area is *cia*, but an older form is retained in Kaisabu, Wagola, Kondowa, Takimpo and Kase *taina* (see Figure 14 above). The original stem *tai must have metathesized to *tia sometime after Cia-Cia dialects and subdialects had begun to differentiate, and subsequently *tia shifted to *cia.
- Throughout nearly the entire Cia-Cia area, the word for ‘slave’ (word list item 054) is *bacua*, and in Kaisabu *batua*. However the broader comparative picture suggests that *batuan was an innovation in the Kaili-Wolio group, and its use across most of Buton Island must be ascribed to widespread borrowing from Wolio.⁷ The shift to *c* must have occurred after this word was introduced, presumably not earlier than the thirteenth century AD.
- Lasalimu has *cimposu* ‘bear cuscus’, borrowed from Kamaru or Wolio *timposu*. Initial *t* must have shifted to *c* after this word was borrowed, that is to say, after Lasalimu had differentiated from the other Butonic lects.
- The word for ‘derris’ (a kind plant, the roots of which are used to poison fish) is *ciße* in Lapandewa, Wali, and Masiri; *cuße* in Wakole, *cuvele* in Wasambua, and *tuße* in Kaisabu (from PWMP *tub(e)liq). There are no surprises here, but the Lasalimu word is *toße*, in which irregular vowel developments protected the initial *t* from shifting to an affricate. However this also implies that Lasalimu still had a form with initial **t* at the time it separated from the other Butonic languages.

Finally, the shift of **t* > **c* preceding high vowels is found elsewhere on Buton Island, for example in Kioko but not Kambowa (Mead 2020a:42), in a *portion* of the Pancana language area, in Liabuku, in a *portion* of the Southern Muna dialect area (but not standard Muna), and even in Kulisu (which is not a Muna-Buton language) (Mead 2020b:36). Since the shift **t* > **c* must be regarded as an areal feature elsewhere on Buton Island, it is not difficult to suppose it is also an areal feature of southern Buton.

6.3 *Loss of *l*

The sound **l* was lost between back vowels. In our data this change affected only one lect, Kondowa. This sound change is striking in its regularity as well as its effect. Compare the forms in Table 4.

⁷ The inherited term for ‘slave,’ **qata*, is retained in Standard Muna *ghata* and Wolowa *hata*.

Kondowa	other Cia-Cia lects	meaning	word list no.
kocikou	cikolu	‘egg’	068
βuu	βulu	‘feathers’	069
ou	olu	‘cloud’	117
laa	lala	‘trail, road’	157
moaa	molala	‘sick’	185
totou	totolu	‘three’	219
ompuu	ompulu	‘ten’	226
i lao	i lalo	‘inside’	239
ao	alo	‘day’	241
ko’ao-’ao	ko’alo-’alo	‘ashamed’	246
jujuai	jujulai	‘to push’	287
pikahokoo	pikahokolo	‘to hunt’	302
loa	lola	‘to fly’	304
mboako	mbolako	‘to steal’	311
aa	ala	‘take’	317
poonai	polonai	‘to vomit’	323

Table 4. Loss of *l in Kondowa.

The sound *l was retained contiguous to a front vowel, as in Kondowa *ela* ‘tongue’, *sili* ‘skin’, *tolinga* ‘ear’, *lale* ‘fly’ (insect), *holeo* ‘sun’ (113) and *kasele* ‘sheath’ (152) among others. It is also irregularly retained in *oalu* ‘eight’ (224).⁸

6.4 Shift of *r

We presume that the Proto Muna-Buton phoneme *r was an alveolar trill or flap. However it shifted to a back fricative in all of the northern tier lects except Lasalimu, as well as in a portion of central-eastern dialect area. Specifically we now find five different reflexes of *r across the Butonic language area. See also illustrative forms in Table 5.

- a voiced pharyngeal fricative [ʕ] in Rongi, Kaongkeongkea, and Wagola;
- a voiced uvular fricative [ʁ] in Gonda Baru, Karya Baru, Gunung Sejuk, Kondowa and Takimpo;

⁸ Alternatively, our conditioning environment for the loss of *l* may need to be reformulated to exclude *a_u* and *u_a*. Whether this is the right tact to take could be clarified with additional data. Note also Kondowa *alusu* ‘smooth’ and *pahalusu* ‘to crush,’ both straightforward borrowings from Malay *halus*.

- a voiceless uvular fricative [χ] in Wasambua;
- a voiceless velar fricative [x] in Kaisabu and the three Kumbewaha lects;
- an alveolar trill or flap [r] elsewhere.

	blood (034)	thorn (097)	eyebrow (006)	salt (127)	two (218)
Rongi	ʃea	ʃui	keʃe	gaʃa	dɔʃua
Kaongkeongkea	ʃea	ʃui	keʃe	gaʃa	dɔʃua
Lapandewa	rea	rui	kere	gara	dorua
Gonda Baru	ʁea	ʁui	keʁe	gaʁa	dɔʁua
Karya Baru	ʁea	kaʁui	keʁe	gaʁa	dɔʁua
Gunung Sejuk	ʁea	ʁui	keʁe	gaʁa	dɔʁua
Wabula	rea	rui	kere	gara	dorua
Liwumpacu	rea	rui	kere	gara	dorua
Wagola	ʃea	ʃui	keʃe	gaʃa	dɔʃua
Kondowa	ʁea	ʁui	keʁe	gaʁa	dɔʁua
Takimpo	ʁea	bici	keʁe	gaʁa	dɔʁua
Kase	rea	rui	kere	gara	dorua
Batu Atas	rea	rui	kere	gara	dorua
Bahari	rea	karui	kere	gara	dorua
Tira	rea	rui	kere	gara	dorua
Burangasi	rea	rui	kere	gara	dorua
Wali	rea	rui	kire	gara	dorua
Bola	rea	rui	kere	gara	dorua
Mambulu	rea	rui	kere	gara	dorua
Bangun	rea	karui	kere	gara	dorua
Masiri	rea	rui	kere	gara	dorua
Wasambua	χea	χui	keχe	gaxa	doxua
Kaisabu	xea	kaxii	kexe	gaxa	xoanu
Wakole	xea	xui	kexe	gaxa	doxua
Wolowa	xea	xui	kexe	gaxa	doxua
Kumbewaha	xea	xui	kexe	gaxa	doxua
Lasalimu	rea	rui	kire	gara	dorua

Table 5. Shift of *r to a back fricative.

The geographic distribution of reflexes of *r is illustrated in Figure 16. Shift to a back voiceless fricative, [χ] or [χ̪], is broadly characteristic of the northern tier lects except for Lasalimu. The shift to a back voiced fricative, [χ̫] or [χ̫̪], is more characteristic of the northern part of the Cia-Cia language area, versus the southern coast which has retained [r].

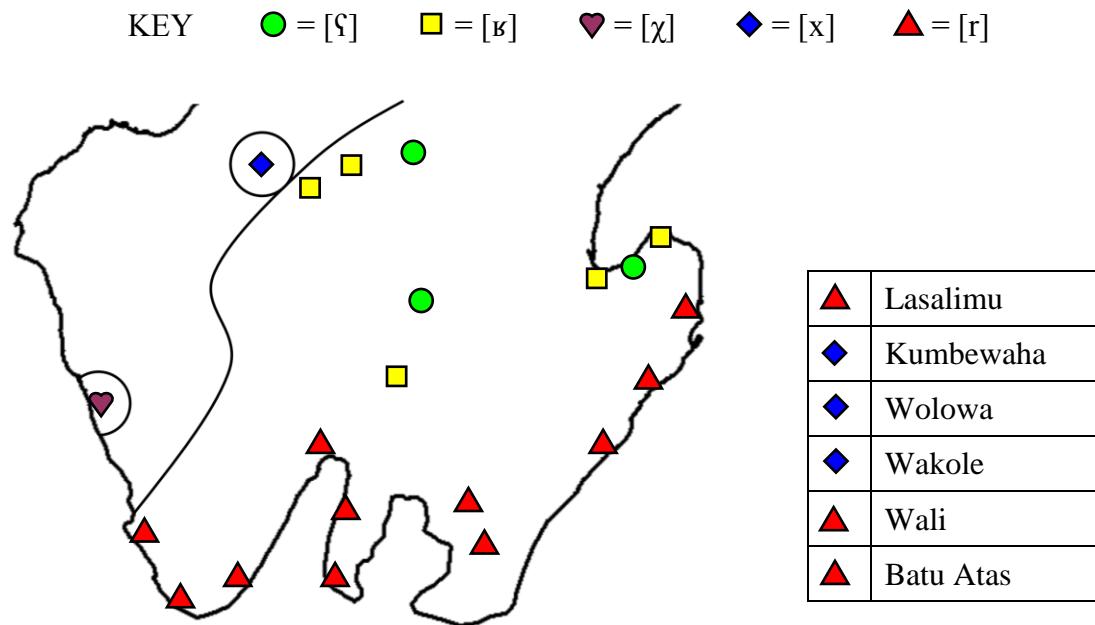


Figure 16. Geographic distribution of reflexes of Proto Butonic *r.

That much said, we wonder what the distribution would look like if more data points were included. In particular it seems the Pasarwajo district was inadequately covered in our survey, and that a finer-grained map of this region would reveal more variation than Figure 16 suggests.

Wherever the shift to a back fricative has been noted, it occurred unconditionally nearly throughout the lexicon, including in recent loanwords such as *pikiri* ‘to think’ (249) (recorded as [pikiri], [pikiʃi], [pikiʃi], etc.) from Arabic *fikr* via Malay *pikir*. This could suggest that the differences between lects, as exemplified in Table 5, are sub-phonemic (Van den Berg 1991c:302). This in turn would simplify the orthographic issue, since the grapheme *r* could then be used for writing throughout the Cia-Cia area, e.g. *rea*, *rui*, *kere*, etc., with people pronouncing these words with their own local flavor.

However this is not true of the most recent loan words. For example *radio* ‘radio’ and *roti* ‘bread’ have not been affected and were recorded with [r] wherever we elicited these terms (see word list entries 348 and 349). Furthermore people seemed well aware when the local sound was not an *r*, and even had suggestions as to how it should be written, e.g. *gh* for the voiced uvular fricative—doubtless from familiarity with how this sound is

written in Standard Muna.⁹ In Wagola respondents told us we should write the voiced pharyngeal fricative with an apostrophe.

6.5 Fate of Proto Muna-Buton *h

Where it has been reconstructed, Proto Muna-Buton *h generally reflects PMP *s. The evidence assembled in Table 6 shows that this sound is reflected as glottal stop in Kumbewaha and Lasalimu. In Cia-Cia and Kaisabu it was usually lost, but retained as h following u. Because this pattern is partly obscured by replacement forms, we use light blue shading to indicate forms in which *h > zero, light green to indicate forms in which it became glottal stop, and light yellow to indicate forms in which it was retained.

PMP	PMB	Kaisabu	Cia-Cia	Kumbe-waha	Lasalimu	meaning	word list no.
*qasin	*qahi	<i>mokaxa</i>	hai	<i>mogaxa</i>	<i>mogara</i>	‘salty’	183
*qasu	*qahu	<i>humbo</i>	hau	ka?u	ka?u	‘smoke’	134
PCel *kimbosu	*kimbohu	simbou	simbou	simbo?u	cimposu	‘monitor lizard’	083
*asu	*ahu	<i>dahu</i>	au	<i>kiau</i>	<i>kiau</i> ¹⁰	‘dog’	085
*basəq	*bahō	<i>bangka</i>	<i>bere,</i> <i>buru,</i> etc.	<i>motopa</i>	moba?o	‘wet’	162
*nasuk	*nahu	<i>pepokotaa</i>	<i>pereka,</i> <i>pitoro,</i> etc.	pipona?u	pepona?u	‘to cook’	262
PCel *kuse	*kuhe	<i>mante</i>	<i>mante</i>	su?e	su?e	‘cucusus’	–
*pusəj	*puhoy	puhe	puhe	pu?e	pu?e	‘navel’	025
*pusuq	*puhu	kopuhu	kopuhu	pepu?u	<i>karusa-</i> <i>rusa</i>	‘banana blossom’	a?a

Table 6. Etyma exhibiting shift of *s > zero in Butonic languages.

One form not shown in Table 6 constitutes an exception. In Cia-Cia *tai*, Kumbewaha *tei* and Lasalimu *tei* we see loss of *h across all lects (Kaisabu has the replacement form

⁹ This sound in Standard Muna originates not from *r but rather from *q (Van den Berg 1991b:4, 8), thus it appears in a different set of words than the ones under consideration here. To take a simple example, compare Muna *ghato*, Cia-Cia *hato* ‘roof, thatch’ (< PMP *qatəp), versus Muna *rato*, Cia-Cia Karya Baru *ghato* ‘come, arrive’ (< PMP *datəŋ).

¹⁰ Related to Barang-Barang *kiyau*, Laiyolo *keyau* and Kalao *keau* ‘dog’ (Laidig and Maingak 1999:67).

mokahi, see word list no. 124), compare PMB *tahi from PMP *tasik. Kumbewaha and Lasalimu *tei* also exhibit vowel raising, a second apparent irregularity. Nonetheless these forms cannot easily be explained from borrowing, and may indicate that the conditioning environment needs to be refined.

6.6 *Intercalation of glottal stop*

In this section we look at the intercalation (also called epenthesis or insertion) of glottal stop between like vowels that occurred as an historical process in most Butonic lects. This intercalation is one of a handful of processes that have given rise to glottal stop in Cia-Cia and the other Butonic languages. Other processes include:

- The regular shift of PMB *h to glottal stop in Kumbewaha and Lasalimu, discussed in § 5.5.
- Irregular shift of *k to glottal stop. This is known to us only in the first person singular independent, post-verbal and genitive pronouns, respectively Proto-Butonic *i(n)a?u, *-a?u and *-?u from earlier *i(n)aku, *aku and *ku. See forms in Appendix 3.
- The glottal stop which sometimes precedes the third person singular post-verbal person marker. In Kumbewaha and Lasalimu the glottal stop is always present (Mead 2017b:36, 2018:36); in the Lapandewa and Wasambua lects it is present only when the preceding verb stem ends in *e*, *a*, or *o* (Van den Berg 1991c:309; Mead 2017c:38). In Kondowa glottal stop occurs only following *e* (in other words, between identical vowels). In Kaisabu glottal stop never occurs. See Table 7. Patterns in other lects have yet to be verified.

stem final vowel	Kaisabu	Cia-Cia Kondowa	Cia-Cia Wasambua	Cia-Cia Lapandewa	Kumbe-waha	Lasalimu
i	-e	-e	-e	-e	-?e	-?e
u	-e	-e	-e	-e	-?e	-?e
e	-e	-?e	-?e	-?e	-?e	-?e
a	-e	-e	-?e	-?e	-?e	-?e
o	-e	-e	-?e	-?e	-?e	-?e

Table 7. Form of the third person object suffix conditioned by the final vowel of the stem in selected Butonic lects.

- The glottal stop which sometimes precedes other suffixes, in particular the applicative suffix *-aso/-?aso* and the related indirect object pronominal markers (which historically result from the fusion of the applicative suffix with a following object marker). See Table A5 in Appendix 3.
- The hard onset with which most vowel initial stems are articulated, and which shows up as glottal stop when such stems are prefixed, for example *ana* [?ana] ‘child’, *ko?ana* ‘have children’ (but compare without glottal stop *posoanaho* ‘nephew’).
- Irregular shift of *q to glottal stop, known to us only in Kumbewaha and Lasalimu in only in two forms. See footnote 5 at the bottom of page 28.¹¹

Against this background, compare the instances of intercalation of glottal stop between like vowels shown in Table 8 on the following page. From the forms shown here, it is apparent that intercalation of glottal stop had its full effect in Kumbewaha, but had almost no effect in Kaisabu (where it is exhibited only in *e?e* ‘water’). In Lasalimu we find three cases where no glottal stop occurs in the sequence *uu*, otherwise intercalation appears to be regular. Intercalation is also regular in Cia-Cia except that in the Liwumpacu, Wagola, Kondowa and Takimpo lects no glottal stop occurs when the like vowels occur in the antepenultimate and penultimate positions (*tooβa* ‘big’, *kaana* ‘house’, *kaaβo* ‘grass’).

Writing about glottal stop in the Lapandewa dialect, Van den Berg held out the possibility that glottal stop insertion between like vowels could be considered a current, synchronic process, that is to say, a glottal stop between two identical vowels is inserted by rule rather than being part of the underlying structure of the concerned lexeme.

All in all, it seems that the occurrence of the glottal can to a large extent be predicted, especially initially, between like vowels. and when a prefix attaches to a vowel-initial base. The problematic cases are the loanwords. some vowel-initial suffixes, and the glottals in (seemingly) monomorphemic roots. In a rigidly generative approach, enough rules and exceptions can probably be formulated to fully account for its occurrence. (Van den Berg 1991c:310)

However even intercalated glottal stops may be difficult to account for by rule. In Lasalimu no glottal stop is inserted where the shift of *q > *h > zero (§ 5.1) resulted in contiguous geminate vowels, compare Lasalimu *raa* ‘branch’ and *paa* ‘thigh’ from Table 2 (without glottal stop) versus *popa?a* ‘four’ in Table 8 (with intercalated glottal stop). The Kondowa lect of Cia-Cia appears to be a similar case, since no glottal stop is inserted where loss of *l (§ 5.3) resulted in contiguous geminate vowels, compare *βuu* ‘feathers’,

¹¹ An identical pattern (? ~ h correspondence) is seen in Kumbewaha, Lasalimu *tocu?u*, Cia-Cia *kocuhu*, Kaisabu *kotuhu* ‘true, correct’ < PMB *kotuqu < PMP *tuqu, but here the glottal stop could be the result of epenthesis between like vowels.

PMP	PMB	Kaisabu	Cia-Cia	Kumbe-waha	Lasalimu	meaning	word list no.
*suqun, *zuŋzuŋ	*suum	suu	su?u	su?u	suu	'carry on the head'	320
*luhəq	*luu	<i>eʔe mata</i>	lu?u	lu?u	luu	'tear'	007
*tuhud	*tuu	tuu	cu?u	cu?u	cuu	'knee'	028
*quhuŋ	*quu	kuu	ku?u	ku?u	ku?u	'mushroo m'	108
*dahən	*roo	xoo	ro?o	xo?o	ro?o	'leaf'	088
*pahuq	*poo	<i>taepa</i>	po?o	<i>taipa</i>	<i>taipa</i>	'mango'	—
*ñawa	*naa	pesinaa	pisina?a	pesine?e	pesine?e	'to breathe'	321
*əpat	*paa, *pato-	patoanu	popa?a	popa?a	popa?a	'four'	220
*ənəm	*noo, *nomo-	nomoanu	nono?o	nono?o	nono?o	'six'	222
*j-kau	*ikoo	isoo	iso?o	iso?o	iso?o	'you'	056
*tawa	*potaa	botaa	botaa?a	<i>pomboi</i>	<i>pemboi</i>	'laugh'	256
*sawa	*saa	saa	sa?a	<i>saba</i> (<Wolio)	<i>kule</i>	'python'	077
*lawas	*laa	laa	la?a	laβa (β unexpl.)	lae (<Wolio)	'trunk'	090
*ŋisi	*ŋihi	ŋii	ŋi?i	<i>leke</i>	<i>ŋinsi</i> (< Kamaru)	'tooth'	014
	*lehe	lelee	(le)le?e	le?e	le?e	'urine'	038
	*maa	maa	ma?a	ma?a	<i>mta</i>	'to eat'	264
		ŋoo	ŋo?o	oŋo	<i>bobo</i>	'nose'	008
		danee	dane?e	dane?e	ane?e	'there is'	208
		tooβa	to?oβa, tooβa	to?oβe	to?oβe	'big'	158
		kaana	ka?ana, kaana	<i>βonua</i>	<i>sapo</i>	'house'	141
		<i>kaxuku</i>	ka?aβo, kaaβo	<i>βoli?i</i>	<i>βoli?i</i>	'grass'	109
		kunde	kunde?e	<i>kaluku</i>	<i>kaluku</i>	'coconut'	099
*waiR	*ue, *ee	e?e	e?e, oe?e, we?e, βe?e	uβe	uβe	'water'	128

Table 8. Butonic forms exhibiting intercalation of glottal stop.

ompuu ‘ten’, *laa* ‘road, trail’, *moaa* ‘sick’ and *aa* ‘take’ from Table 4, all without glottal stop. The implication in both cases is that while intercalation of glottal stop occurred as an historical process, at some point it ceased in its application and cannot be regarded as a current, synchronic process.

Even in Kaisabu with its relative paucity of glottal stops, we should simply say that a process of intercalation of glottal stop never occurred here. The language does have glottal stop from other sources, just not very many. It has glottal stop in first person pronominal forms *indaʔu*, *-aʔu*, *-ʔu*, and at morpheme boundaries *kaʔanaʔana* ‘newborn’, *koloʔuma* ‘hermit crab’, *kaʔolu* ‘cloud’, *poʔombai* ‘to say’ among others. Kaisabu lacks glottal stop preceding third person singular *-e* but, unique among Butonic lects, it exhibits the shift of the completive marker (clitic) **po* > *ʔo* (Mead 2017a:38–39) as in *tainaʔo* ‘not yet’, *daneeʔo* ‘there still is, there still are’. And while Kaisabu generally eschews glottal stop insertion between like vowels, a glottal stop is found in all three deictic presentatives *noʔoya* (near speaker), *ntuʔuya* (near hearer), and *loʔoya* (distant) (Mead 2017a:37).

If there are places where intercalation of glottal stop is automatic, we might be able to determine this by looking at recent borrowings. In some locations we recorded the word for ‘to work’ as *karajaa*, a loanword from Malay *kerja* (ultimately Sanskrit *kārya*) with expected lengthening of the final vowel (to avoid placing stress where none exists in the source word). However only in the following locations did we record it with intercalated glottal stop: Wagola, Liwumpacu, Wagola *karajaʔa*; Kondowa *kaʔajaʔa*, Wakole, Wolowa *kaxajaʔa* (see word list no. 278 in Appendix 4). Unfortunately we failed to elicit other terms which could further inform us on the matter. The following is a partial list of some additional loanwords with geminate vowels, drawn from a draft Cia-Cia dictionary compiled by a native speaker (Abidin 2015).

<i>haragaa</i> ‘price’	< Malay <i>harga</i> < Sanskrit <i>argha</i>
<i>arabaa</i> ‘Wednesday’	< Malay <i>Arbaa</i> < Arabic <i>al-arba'</i> <i>ā</i>
<i>banaa</i> ‘spool, string’	< Malay <i>benang</i> < PWMP * <i>bənanj</i> ¹²
<i>gataa</i> ‘rubber’	< Malay <i>getah</i> < PWMP * <i>gətəq</i> ¹³
<i>patee</i> ‘stink bean’	< Malay <i>petai</i> ¹⁴
<i>see</i> ‘cent’	< Malay <i>sen</i> < Dutch <i>cent</i>
<i>sakusii</i> ‘witness’	< Malay <i>saksi</i> < Sanskrit <i>sākṣi(n)</i>
<i>roo</i> ‘skirt’	< Malay <i>rok</i> < Dutch <i>rok</i>

¹² Although ultimately of native Austronesian provenance, /a/ in the penultimate syllable and final long vowel indicate borrowing.

¹³ Although ultimately of native Austronesian provenance, /a/ in the penultimate syllable and final long vowel indicate borrowing.

¹⁴ A kind of plant (*Parkia* sp.) with edible beans. Whilst an etymology for Malay *petai* is unknown, /a/ in the penultimate syllable and final long vowel in the Cia-Cia form indicate borrowing.

<i>raboo</i> ‘bamboo shoot’	< Malay <i>rebung</i> < PMP *rəbuŋ ¹⁵
<i>saputuu</i> ‘Saturday’	< Malay <i>Sabtu, Saptu</i> < Arabic <i>as-sabt</i>
<i>wakutuu</i> ‘time’	< Malay <i>waktu</i> < Arabic <i>waqt</i>
<i>paraluu</i> ‘need’	< Malay <i>perlu</i> < Arabic <i>perdu</i>

Because Abidin leaves glottal stop unrepresented throughout his dictionary, we cannot tell by this source whether these forms have an intercalated glottal stop or not. In a future study some or all of these forms could be elicited across the Butonic language area to check for presence or absence glottal stop between like vowels.

6.7 *Labial fricative*

Sanjoko (2015:62) indicates that the bilabial fricative is voiceless in Lasalimu, while Hanan (2012:90 ff.; 2013:73) indicates that it is voiceless (\emptyset) in Gonda Baru. While we found some (subphonemic) variation in whether this sound was bilabial or labio-dental, in no location did we record it as voiceless. Orthographically this sound can be written unproblematically as *w* throughout the Butonic language area.

6.8 *Nasal-sibilant sequence ns versus nc*

There was probably some natural, subphonemic variation across the Butonic area whether the nasal-sibilant combination had a ‘soft’ [ns] articulation or a ‘hard’ [nʃ] articulation, a situation not unfamiliar in other parts of Sulawesi such as Bobongko (Mead 2001:67) and Uma (Martens 2014:1). It is one of the features which distinguishes Taa from other Pamona dialects (Martens 1997), Kulawi from Lindu (Adriani and Esser 1939 I:8, III:1), and closer to home also Wolio from Kamaru. Compare:

Wolio	Kamaru	
<i>lenci</i>	<i>lensi</i>	‘tail’
<i>nginci</i>	<i>nginsi</i>	‘tooth’
<i>muncu</i>	<i>ngunsu</i>	‘snout’
<i>kancili</i>	<i>kansili</i>	‘pinky finger’
<i>incia</i>	<i>isia</i>	‘he, she, they’
<i>mincuana</i>	<i>mensuana</i>	‘not’ (ascriptive negator)

Our information on this variation in Butonic languages is thin, and we limit our presentation to noting only a few words where we encountered differences.

¹⁵ Although ultimately of native Austronesian provenance, /a/ in the penultimate syllable and final long vowel indicate borrowing. We ourselves recorded *raboo* (with unimploded voiced stop and no intercalated glottal stop) in Lapandewa, Wali, Masiri and Kumbewaha. Compare via direct inheritance Wasambua *χobu*, Lasalimu *robu*, Kaisabu *lobu* (this last exhibits irregular shift of *r > l).

- *kansili* ~ *kancili* ‘pinky finger’

We recorded the response for ‘pinky finger’ as *kansili* in Wali and Lasalimu, and as *kancili* in Lapandewa, Masiri, Wasambua, Wakole, Wolowa, and Kumbewaha. Kaisabu has similar *kaincili* (with excrecent *i*).

- *gonso* ~ *gonco* ‘throat, neck’

We recorded *gonso* as the word for ‘throat’ in Wali, elsewhere *gonco* predominates, including Lapandewa, Bahari, Masiri, Kaisabu, Wakole, and Kumbewaha. In a further set of lects *gonco* has apparently shifted in meaning to ‘neck’ (see word list no. 018), including Gonda Baru, Karya Baru, Gunung Sejuk and Wabula. Compare Wolio *gonco* ‘throat, pharynx, larynx’ (Anceaux 1987:38).

- *ngunsu* ~ *nguncu* ‘labial circle; beak, bill; nipple, teat’

ngunsu was recorded in Lasalimu as the word for ‘labial circle, external mouth area’ (word list no. 012) and in Wali as the word for ‘beak, bill’ and ‘nipple, teat’ (*ngunsuno cici*). In certain other locations the form was recorded as *nguncu*, including Lapandewa, Kaongkeongkea, Masiri, Wasambua, Wakole, Wolowa, and Kumbewaha. Kaisabu has instead *muncu*, borrowed from Wolio.

- *konusu* ~ *konuncu* ‘fingernail’

The usual word for ‘fingernail’ is *konusu* or *kunusu*, except in Wabula and Kase where we recorded the response as *konuncu* (western Cia-Cia lects and Kaisabu have *konisi* or *kunisi*) (see word list no. 021). This suggests that, at least in Wabula and Kase, when *s* is prenasalized it naturally has a ‘hard’ (affricate) articulation.

- *mansuana* ~ *mancuana* ‘old (of persons)’

The form *mancuana* predominates across the survey area; the form *mansuana*, with [ns], was recorded only in Lasalimu, Wali, Wagola, and Kondowa. See item no. 169 in the appended word lists. These forms are borrowed from Wolio *mancuana* ‘old’.

Despite the small amount of data, one can still draw certain generalizations. First *ns* is a relatively infrequent consonant sequence in Butonic languages. In our data it is found only in the Lasalimu, Wali, Wagola and Kondowa lects, although it may also exist in other locations where we did not collect data (or also in Kase, where our data are silent). Elsewhere it developed (or naturally had) a ‘hard’ (affricate) articulation and merged with *nc* sequences that originated from the affricatization of *t* that occurred preceding high vowels (§ 6.2). Kaisabu on the other hand retains a contrast between *nc* and *nt* as the latter never underwent affricatization. Figure 17 illustrates these three pathways of development. As concrete examples we also give the reflexes of three protoforms, **kansili* ‘pinky finger’, **mobunti* ‘full, satiated’, and **munte* ‘citrus’.

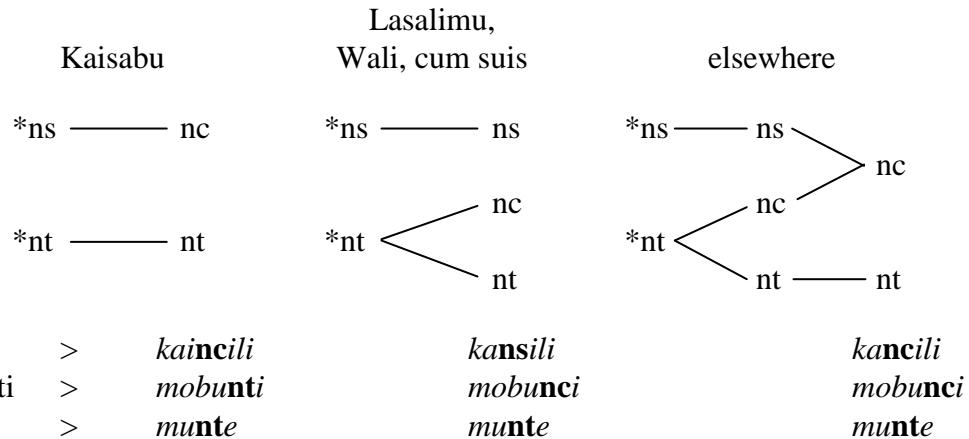


Figure 17. Historical sources and development of *ns*, *nc* and *nt* in Butonic lects.

6.9 Adjectives with *ka-* versus *mo-*

An interesting feature of these word lists is encountered in the adjectives. Although not a hard and fast rule, in three lects—Rongi, Kaongkeongkea, and Lapandewa—adjectives were more often than not elicited with the prefix *ka-*, whereas in other lects adjectives were usually elicited with the prefix *mo-* (also realized as a syllabic *m-*, *m-* onset, or a homorganic nasal). An example of this is Rongi, Kaongkeongkea and Lapadewa *kacuka* ‘hard’ versus *mocuka*, *mcuka*, *mcuka*, and *ncuka* elsewhere in the Cia-Cia area (word list no. 194). Additional examples can be gleaned from Appendix 4, items 161 through 206.

The implications this has outside the context of word list elicitation—for example for grammar, speaking, writing, or the preferred citation forms of words in a dictionary—is currently not clear.

7 Conclusions

7.1 Languages and dialects

The purpose of this survey was to determine the dialect situation in Cia-Cia. From the perspective of lexicostatistics, the main Cia-Cia language area comprises a western dialect and a central-eastern dialect complex (more on this below). We also collected data in six ‘northern tier’ communities which stand further apart from Cia-Cia.

We consider Wasambua to be a third, outlier dialect of Cia-Cia. On average it is 76% lexically similar with western Cia-Cia lects, and 71% lexically similar with central-eastern lects.

Kaisabu is 74% lexically similar with Wasambua and on average 69% lexically similar with other Cia-Cia lects. From the perspective of historical sound change Kaisabu is

conservative. It retains *t* whereas this sound shifted to an affricate before high vowels in other Butonic lects (e.g. Kaisabu *titi* ‘breast’ elsewhere *cici*, see further § 6.2), and lacks intercalated glottal stops (e.g. Kaisabu *kuu* ‘mushroom’, elsewhere *kuʔu*, see further § 6.6). In the current edition of the Ethnologue, Kaisabu is listed as a dialect of Cia-Cia. However because of reported low intelligibility—Cia-Cia respondents considered Kaisabu to be as difficult to understand as Muna and Tukung Besi—we propose that Kaisabu be elevated to separate language.

Prior to this study Kumbewaha was regarded as a separate language, and we see no reason to overturn this status. However the present study reveals that Kumbewaha is more dialectally complex than had heretofore been recognized. Wolowa should be considered a distinct dialect of Kumbewaha. A third lect, Wakole, is probably best regarded as a subdialect of Wolowa. Lexical similarity scores (Wakole-Wolowa 87%, Wakole-Kumbewaha 78%) could indicate that it is a third dialect; however these low scores could just as well be the artefact of a poorly collected word list rather than reflective of actual differences.

Prior to this study Lasalimu was regarded as a separate language, and we see no reason to overturn this status. Lexically Lasalimu is the most divergent of all Butonic lects (73% to 64% lexically similar with Kumbewaha lects, 59% to 54% with all other Butonic lects). Nonetheless historical sound change clearly points to Lasalimu being a Butonic language (§ 6.1). It should *not* be joined with Kamaru or with nearby Pancana lects as has sometimes been proposed (§ 2.2).

As stated previously, the core Cia-Cia language area divides into a western dialect and a central-eastern dialect complex. Within both of these areas a number of subdialects can be recognized.

Western dialect. The western dialect is spoken in the southern portions of the Batauga and Sampolawa districts. It is represented in our survey by word lists collected in Masiri, Bola, Bangun, and Mambulu. In consultation with La Ode Abidin, compiler of a Cia-Cia dictionary who is from this area, we suggest that at least three subdialects be recognized within the western area. Following the coast counterclockwise, these are *Masiri* (spoken in Masiri and Majapahit), *Poogalampa* (spoken in Lampanairi, Bola, Pogalampa, Bangun, and Wawoangi) and *Mambulu* (spoken in Katilombu, Jaya Bakti, and Todombulu). Wawoangi has some peculiarities unique to itself and could possibly be recognized as a distinct subdialect, but this requires further investigation.

Central-eastern dialect, cluster 1: Following the coast past the mouth of the Sampolawa River, the next villages one comes to are Tira, Bahari, and Lande. These villages compose what could be called the *Wapulaka* subdialect (a traditional name for this area). The variety spoken in Bahari is recognized as being close to that of the two island dialects, *Wali* (on the southern half of Binongko Island) and *Batu Atas*, which also clearly belong to this cluster. Wapulaka may thus represent the homeland area from where speakers

spread to Binongko and Batu Atas.¹⁶ To the east of Tira, Bahari, and Lande, the village of Burangasi is located in the southern part of the Lapandewa district, but occupies an interior rather than a coastal location. Nonetheless from the viewpoint of lexicostatistics *Burangasi* also belongs to this cluster.

Central-eastern dialect, cluster 2: Separating Burangasi from villages further to the east is a high ridge. At the time we conducted our survey this ridge could only be crossed on foot. After passing over this ridge and descending to the coast, the first village one arrives at is Wabula. From Wabula one can travel by coastal road to the town of Pasarwajo.

In the coastal stretch from Wabula to Pasarwajo several subdialects can be recognized, and even then we still don't know whether we have captured the full range of the linguistic diversity in this area: *Wabula*, *Kase*, *Holimombo* (purportedly represented by our Liwumpacu and Wagola lists), *Kondowa*, and *Takimpo*. It should be noted that four sound changes cut across this area: loss of *l (§ 6.3), shift of *r to a back fricative (§ 6.4), intercalation of glottal stop (§ 6.6), and phonetic realization of the nasal-sibilant sequence (§ 6.8). Although we do not repeat those discussions here, representative lexemes which illustrate each of these changes are given in the first four columns of Table 9. One of the generally recognized features of the Takimpo dialect is the use of *taina* as the word for 'no', versus *cia* throughout most of the rest of the Cia-Cia language area. However *taina* is also used in the Wagola, Kondowa and Kase lects; see the last column of Table 9 and also Figure 14 on page 25.

	'cloud'	'blood'	'house'	'old'	'no'
Takimpo	olu	aea	kana	mancuana	taina
Wagola	olu	fea	kaana	mansuana	taina
Kondowa	ou	aea	kaana	mansuana	taina
Liwumpacu	olu	rea	kaana	mancuana	cia
Kase	olu	rea	ka?ana	—	taina
Wabula	olu	rea	ka?ana	mancuana	cia

Table 9. Selected lexemes from cluster 2 lects.

Immediately to the north of Takimpo are three villages, Kombeli, Awainulu, and Laburunci. We were told the inhabitants of these villages speak the Laporo dialect (see further below). Beyond Laburunci there are reportedly additional Takimpo speakers in Banabungi, Pasarwajo proper, and Kambulambulana. However during the course of this survey we didn't collect data in any of these villages. Beyond Kambulambulana

¹⁶ The close relationship of these two 'island' dialects is generally recognized. On Batu Atas we even heard tales of how the two islands, Batu Atas and Binongko, were at one time a single island, in fact the first land to appear anywhere above the surface of the ocean, and thus the place whence all humanity originated. Going along with this is a belief that Batu Atas-Wali was the original language of the world.

commences an area where the coastal strip has been settled by recent migrants, including Cia-Cia migrants from various dialect areas (see Appendix 2), with the possible exceptions of Wasaga and Kancinaa. These two villages were reported to us as Wabula-speaking, but according to Abdullah et al. (1991:9) they have their own though nearly extinct dialect.

Central-eastern dialect, cluster 3: Our third cluster comprises the six interior villages of Lipu Mangau, Gunung Sejuk, Hendea, Gonda Baru, Bugi, and Karya Baru. These villages are located in the watershed of the Sampolawa river albeit in two different districts (Sampolawa and Sorawolio). These villages constitute part of the *Laporo* subdialect area, which appears to be geographically discontinuous as this dialect is also spoken on the outskirts of the town of Pasarwajo (reportedly Kombeli, Awainulu, Laburunci, Lapodi, and Warinta villages).

The sound *r* shifted to a back fricative in Lipu Mangau (Konisi 1999) as well as the three lects where we collected data: Gunung Sejuk, Gonda Baru and Karya Baru (§ 6.4). However the Laporo-speaking villages of Kombeli and Awainulu (south of Pasarwajo) were reported to us as retaining this sound as an apical trill.

How the Laporo attained their present locations also requires further investigation. A 1964 U.S. Army map locates Gonda and Bugi further east than their present locations. Van den Berg (1991c:306) too referred to Gonda village as located in the Pasarwajo district, although no village by that name is found there today—only Gonda Baru ('New Gonda') in the Sorawolio district. These data suggest a relatively recent westward migration.

Central-eastern dialect, cluster 4: This is the 'loosest' of our four recognized clusters. The *Lapandewa* subdialect is spoken in the southern portion of the area. In the northern portion is the *Wakaokili* subdialect spoken in Waanguang and Kaongkeongkea villages. South of Kaongkeongkea in the direction of Lapandewa lies the village of *Rongi*. In our analysis Kaongkeongkea and Rongi are the most divergent lects of the central-eastern cluster. In fact one can suppose they stand at one end of a dialect chain that runs across the core Cia-Cia language area until reaching its other end at Masiri.

One potential reason for uniting Lapandewa with Rongi and Kaongkeongkea as a cluster is that adjectives in these lects were consistently elicited with the prefix *ka-*, see § 6.9.

Of all the dialects and subdialects of the core Cia-Cia language area, during the course of this survey we found no evidence to indicate one of them was more prestigious than another. One of the questions we asked on the sociolinguistic questionnaire to get at this notion was: "If one dialect of Cia-Cia were to be chosen for radio broadcasts or books, which one should it be?" The consistent response was people either demurred to answer, or they chose their own dialect.

7.2 Survey shortcomings

Although we had set out to survey the entire Cia-Cia language area, in hindsight it is clear that we failed in certain areas. In particular the northern part of the Pasarwajo district was inadequately covered. For completeness we should have included one or more word lists from the northern Takimpo area (Banabungi, Pasarwajo, or Kambulambulana) and at least two word lists from the eastern Lapor area (one from Kombeli, Awainulu, or Laburunci, another from Lapodi or Warinta). We should also have attempted to collect a word list in Wasaga or Kancinaa that was representative of the speech of the original inhabitants (and not the more recent Cia-Cia migrants who mostly populate these villages).

Despite these shortcomings, we hope that we have managed to shed some light on the Cia-Cia dialect situation, and that this study will serve as a springboard for further research and development of the Cia-Cia language.

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Appendix 1: Administrative divisions

Cia-Cia, Kaisabu, Kumbewaha and Lasalimu are spoken in the city (*kota madya*) of Baubau and in the regencies (*kabupaten*) of Buton, South Buton and Wakatobi.

Table A1 is a list of these second-level administrative divisions along with their third-level divisions or districts (*kecamatan*). At the time that this survey was conducted, Baubau and Wakatobi comprised eight districts each, while Buton and South Buton comprised seven districts. The maps in the third column are links. Click on the map to visit an internet page where a larger map can be viewed or downloaded.

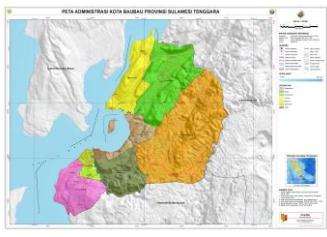
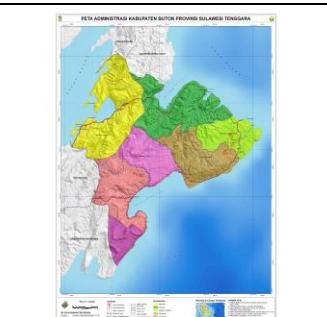
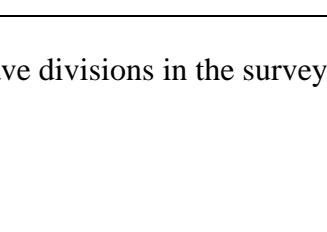
Baubau City	Lea-Lea	
	Bungi	
	Sorawolio	
	Kokalukuna	
	Wolio	
	Murhum	
	Batu Poaro	
	Betoambari	
	Kapontori	
Buton Regency	Lasalimu	
	Lasalimu Selatan	
	Siotapina	
	Wolowa	
	Pasarwajo	
	Wabula	
	Lapandewa	
South Buton Regency	Sampolawa	
	Batauga	
	Batu Atas	
	Siompu	
	Siompu Barat	
	Kadatua	
	Wangi-Wangi	
Wakatobi Regency	Wangi-Wangi Selatan	
	Tomia	
	Tomia Timur	
	Kaledupa	
	Kaledupa Selatan	
	Binongko	
	Togo Binongko	

Table A1. Second- and third-level administrative divisions in the survey area.

Appendix 2: Distribution of languages and dialects

In this appendix we present our best estimate of the village-by-village distribution of languages and dialects in the survey area. This picture is coarse grained, as often our information was collected outside of the area with little or no attempt to verify or crosscheck the reports we were receiving.

District names, followed by the name of the regency (or city) to which it belongs, are given in bold capital letters. An asterisk preceding the name of a village means that we collected a word list in that location. The second column indicates whether the village is administratively a *desa* (rural village) or a *kelurahan* (urban village or ward). Latitude (south) and longitude (east) are given in the third and fourth columns, if collected during the course of this survey.

The fifth column gives our notes concerning what languages and/or dialects are spoken in that village. In this column we also use color coding: purple for the core Cia-Cia language area, red for one of the northern tier Butonic lects (see § 4 as well as Figure 5 in the body of this paper), green for a Pancanic lect (simply noted during the course of the survey, but no data was collected from these locations), and blue for Busoa and the closely related Kambe-kambero lect (Van den Berg 1991:44–45, 2020). All other languages are given in normal font. ‘Exodus from Ambon’ is not a linguistic category per se but refers to people who fled (returned) to Buton Island during a period sectarian violence in the Maluku Islands from 1999 to 2001. ‘Cia-Cia Sampolawa’ as used below means one of the western subdialects (Mambulu, Poogalampa, Masiri). ‘Wakatobi’ refers to a Tukang Besi dialect, sometimes further specified according to island of origin (Wanci, Kaledupa, Tomea, Binongko).

name of village	desa / kelurahan	latitude	longitude	notes
SORAWOLIO, BAUBAU CITY				
* Kaisabu Baru	kelurahan	5° 28.513'	122° 41.204'	Wolio, Pancana, Kaisabu
* Karya Baru	kelurahan	5° 29.370'	122° 42.247'	Cia-Cia Lapor
Bugi	kelurahan			Cia-Cia Lapor
* Gonda Baru	kelurahan	5° 28.625'	122° 43.714'	Cia-Cia Lapor
BATU ATAS, SOUTH BUTON				
Batu Atas Timur	desa	6° 12.357'	122° 43.125'	Cia-Cia Batu Atas
Tolando Jaya	desa			Cia-Cia Batu Atas
Wambongi	desa			Cia-Cia Batu Atas
Batu Atas Barat	desa			Cia-Cia Batu Atas
* Batu Atas Liwu	desa	6° 12.149'	122° 41.022'	Cia-Cia Batu Atas
Taduala	desa			Cia-Cia Batu Atas
Wacuala	desa			Cia-Cia Batu Atas

BINONGKO, WAKATOB				
Taipabu	kelurahan	5° 55.260'	123° 58.309'	Wakatobi Binongko
Makoro	desa			Wakatobi Binongko
Palahidu Barat	desa	5° 53.583'	124° 0.847'	Wakatobi Binongko
Palahidu	kelurahan	5° 54.488'	124° 2.265'	Wakatobi Binongko
Rukuwa ¹⁷	kelurahan	5° 54.288'	124° 2.130'	Wakatobi Binongko
Wakarumende ¹⁸	desa	5° 55.736'	124° 2.929'	Cia-Cia Wali
One Laro ¹⁹	desa	5° 56.558'	124° 3.312'	Cia-Cia Wali
Jaya Makmur	desa			Cia-Cia Wali
* Wali ²⁰	kelurahan	5° 58.343'	124° 3.992'	Cia-Cia Wali
TOGO BINONGKO, WAKATOB				
Popalia ²¹	kelurahan			Wakatobi Binongko
Oihu	desa			Cia-Cia Wali
Sowa	kelurahan			Wakatobi Binongko
Mole	desa			Cia-Cia Wali
Haka	desa			Cia-Cia Wali
Waloindi	desa			Wakatobi Binongko
BATAUGA, SOUTH BUTON				
Lawela Induk	desa	5° 32.696'	122° 35.998'	Muna Gumas
Lawela Selatan	desa			Muna Gumas
Bandar Batauga	kelurahan			Wolio (for the most part)
Busoa	kelurahan	5° 35.057'	122° 35.744'	Cia-Cia Batu Atas, Busoa ²² , Muna, Wolio
* Lakambau	kelurahan	5° 36.381'	122° 35.808'	Cia-Cia Batu Atas, Wasambua, exodus from Ambon (Cia-Cia speaking) ²³
Laompo	kelurahan	5° 36.711'	122° 36.056'	Muna Gumas ²⁴
Molagina	kelurahan			exodus from Ambon
* Masiri	kelurahan	5° 39.344'	122° 37.022'	Cia-Cia Masiri, Kambe-kambero
Majapahit	kelurahan	5° 40.171'	122° 37.333'	Cia-Cia Masiri

¹⁷ District capital.

¹⁸ Unofficially known as Kampo-Kampo.

¹⁹ Unofficially known as Lagongga.

²⁰ To get to Wali, be sure to take a boat that docks at Rukuwa.

²¹ District capital.

²² According to Van den Berg (2020:1) there are also Busoa speakers in Lakambau.

²³ Batu Atas dialect spoken in kelingkungan Batu Atas and Bahari ; Wasambua spoken in kelingkungan Wasambua ; Ambon exodus spoken in kelingkungan Pasar Timur and Pasar Barat.

²⁴ The Muna dialect spoken in kelingkungan Burukene is slightly different but still “Gumas”.

Lampanairi	desa	$5^{\circ} 40.890'$	$122^{\circ} 37.630'$	Cia-Cia Poogalampa
* Bola	desa	$5^{\circ} 41.372'$	$122^{\circ} 38.229'$	Cia-Cia Poogalampa
Pogalampa	desa	$5^{\circ} 41.347'$	$122^{\circ} 39.732'$	Cia-Cia Poogalampa

SAMPOLAWA, SOUTH BUTON

* Bangun	desa	$5^{\circ} 40.988'$	$122^{\circ} 40.266'$	Cia-Cia Poogalampa
Wawoangi	desa			Cia-Cia Poogalampa (Wawoangi)
Katilombu	kelurahan	$5^{\circ} 38.338'$	$122^{\circ} 41.747'$	Cia-Cia Mambulu
* Jaya Bakti	kelurahan	$5^{\circ} 37.699'$	$122^{\circ} 42.311'$	Cia-Cia Mambulu
Todombulu	kelurahan	$5^{\circ} 37.091'$	$122^{\circ} 42.515'$	Cia-Cia Mambulu
Lipu Mangau	desa	$5^{\circ} 35.324'$	$122^{\circ} 43.922'$	Cia-Cia Lapor
* Gunung Sejuk	desa	$5^{\circ} 34.867'$	$122^{\circ} 44.371'$	Cia-Cia Lapor
* Sandang Pangan ²⁵	desa	$5^{\circ} 32.035'$	$122^{\circ} 44.714'$	Cia-Cia Rongi
Hendea	desa	$5^{\circ} 30.631'$	$122^{\circ} 44.911'$	Cia-Cia Lapor
* Tira	desa	$5^{\circ} 38.968'$	$122^{\circ} 43.000'$	Cia-Cia Wapulaka
* Bahari	desa	$5^{\circ} 40.816'$	$122^{\circ} 42.893'$	Cia-Cia Wapulaka
Bahari 2	desa			Cia-Cia Wapulaka
Bahari 3	desa			Cia-Cia Wapulaka
Gerak Makmur ²⁶	desa			Cia-Cia Wapulaka
Windu Makmur	desa			Cia-Cia (dialect unknown)
Watiginanda	desa			Cia-Cia (dialect unknown)

LAPANDEWA, SOUTH BUTON

Lapandewa Makmur	desa			Cia-Cia Lapandewa
Lapandewa Kaindea	desa			Cia-Cia Lapandewa
* Lapandewa	desa	$5^{\circ} 38.832'$	$122^{\circ} 47.230'$	Cia-Cia Lapandewa
Lapandewa Jaya	desa			Cia-Cia Lapandewa
Gaya Baru ²⁷	desa			Cia-Cia Burangasi
* Burangasi	desa	$5^{\circ} 40.263'$	$122^{\circ} 47.239'$	Cia-Cia Burangasi
Burangasi Rumbia	desa			Cia-Cia Burangasi

WABULA, BUTON

Wasuembia	desa			Cia-Cia Wabula
* Wabula I	desa	$5^{\circ} 36.754'$	$122^{\circ} 51.416'$	Cia-Cia Wabula 99%
Wabula Induk	desa	$5^{\circ} 36.329'$	$122^{\circ} 51.690'$	Cia-Cia Wabula
* Wasumpela ²⁸	desa	$5^{\circ} 35.020'$	$122^{\circ} 52.580'$	Cia-Cia Kase 99%

²⁵ Alternate name: Rongi.

²⁶ The village of Londe is located here, on the coast.

²⁷ Former name: Kalaliba.

Holimombo ²⁹	desa	5° 33.925'	122° 53.498'	Cia-Cia Wabula, Bajau ³⁰
* Koholimombona ³¹	desa	5° 33.237'	122° 53.503'	Cia-Cia Holimombo 99%
PASARWAJO, BUTON³²				
Holimombo Jaya ³³	desa	5° 32.078'	122° 53.830'	Cia-Cia Holimombo 50% Cia-Cia Burangasi 50%
* Kondowa	desa	5° 30.475'	122° 52.645'	Cia-Cia Kondowa 90% Cia-Cia Wabula 4% Binongko 4% others 2% (Wolio four households)
Dongkala	desa	5° 30.870'	122° 52.142'	Cia-Cia Wabula 50% Wakatobi Binongko 50%
* Wagola	kelurahan	5° 31.429'	122° 51.656'	Cia-Cia Holimombo 95% ³⁴ Cia-Cia Takimpo
* Takimpo	kelurahan	5° 31.766'	122° 50.829'	Cia-Cia Takimpo
Kombeli	kelurahan			Cia-Cia Lapor ³⁵
Awainulu	kelurahan			Cia-Cia Lapor ³⁶
Laburunci	desa			Cia-Cia Lapor ³⁷
Banabungi ³⁸	desa			Wolio (majority); Cia-Cia Takimpo, Cia-Cia Wabula
Pasarwajo	kelurahan			Cia-Cia Takimpo 60% Cia-Cia Wabula 15%
Kambula-mbulana	kelurahan			Cia-Cia Takimpo 70%
Saragi	kelurahan			Cia-Cia Burangasi
Wasaga ³⁹	kelurahan			Cia-Cia Wabula
Kahulungaya	kelurahan			Cia-Cia Wabula
Kancinaa	desa			Cia-Cia Wabula
* Kabawakole	desa	5° 26.202'	122° 53.979'	Cia-Cia Wabula, Wakole

²⁸ Unofficially known as Kase.

²⁹ Unofficially known as Tolando.

³⁰ This village has two divisions, Holimombo, which is Cia-Cia speaking, and Bajo Bahari which is Bajau speaking; the Cia-Cia here speak the Wabula dialect, even though they use the name Holimombo.

³¹ Unofficially known as Liwumpacu, sometimes shortened to Lipacu; this is the original “Holimombo”, the name Koholimombona was given by the Butonese Sultanate.

³² There are also Cia-Cia Sampolawa in Kecamatan Pasarwajo, but they don’t have their own village anywhere.

³³ Unofficially known as Belo.

³⁴ Here people use /ʃ/; Holimombo speakers in Liwumpacu use /r/.

³⁵ Use /s/.

³⁶ Use /r/.

³⁷ Use /r/.

³⁸ Formerly the site of a business undertaking that attracted outsiders.

³⁹ Formerly named Wakoko.

Mantwu	desa			Lambusango , Wolio
Winning ⁴⁰	desa			Lambusango , Wolio
Lapodi	desa			Cia-Cia Laporo, Cia-Cia Takimpo
Warinta	desa			Cia-Cia Laporo
Waanguangu	desa			Cia-Cia Wakaokili ⁴¹
* Kaongkeongkea ⁴²	desa	5° 28.181'	122° 45.164'	Cia-Cia Wakaokili
WOLOWA, BUTON				
Kaumbu ⁴³	desa	5° 26.292'	122° 54.318'	Cia-Cia Laporo
Galanti ⁴⁴	desa	5° 26.077'	122° 54.933	Cia-Cia Laporo
Wolowa	desa	5° 25.735'	122° 56.584'	Cia-Cia Wabula
Bungi ⁴⁵	desa			Cia-Cia Sampolawa
Matawia	desa	5° 24.189'	122° 57.637'	Cia-Cia Burangasi, Cia-Cia Lapandewa
* Wolowa Baru	desa	5° 23.621'	122° 58.736'	Wolowa
Sukamaju ⁴⁶	desa			exodus from Ambon
SIOTAPINA, BUTON				
Walompo	desa			Cia-Cia Laporo 80%, Wolio 20%
Bahari Makmur ⁴⁷	desa			Bajau 100%
Matanauwe	desa			Cia-Cia Wabula
Sambuabalo	desa			Cia-Cia Sampolawa 100%
Gunung Jaya ⁴⁸	desa			Cia-Cia Laporo 90% Cia-Cia Wabula 10%
Kuraa ⁴⁹	desa			Cia-Cia Laporo 90% Cia-Cia Wabula 10%
Manuru	desa			Ambon exodus 80% Cia-Cia Laporo 10% Cia-Cia Wabula 10%
* Kumbewaha ⁵⁰	desa	5° 24.320'	123° 6.013'	Kumbewaha 60%, Bajo 20%, Cia-Cia mixed (Laporo, Sampolawa) 20%

⁴⁰ Sometimes spelled Wining.

⁴¹ Language differs from Kaongkeongkea, but more similar to it than to Hendea.

⁴² Former name Wakaokili.

⁴³ Name is articulated with glottal stop: Ka'umbu.

⁴⁴ Formerly part of Kaumbu village.

⁴⁵ Formerly part of Matawia village.

⁴⁶ Formerly part of Wolowa Baru village.

⁴⁷ Split off from Matanauwe; to reach this village follow the turn-off toward the coast after desa Walompo.

⁴⁸ Split off from Kuraa.

⁴⁹ Name is articulated with glottal stop Kura'a.

⁵⁰ Also referred to as Kanawa, and the Kumbewaha people as To Kanawa.

Karya Jaya	desa			Wakatobi Kaledupa
Sumber Sari	desa			Javanese transmigrants 100%
Labuandiri	desa			Pancana ⁵¹
LASALIMU SELATAN, BUTON				
Ambauu Indah ⁵²	desa	5° 19.130'	123° 9.908'	Cia-Cia Laporø, Wakatobi, Javanese, Balinese
Ambauu Togo	desa			Cia-Cia Laporø, Wakatobi
Megabahari	desa			Wakatobi, exodus from Amboñ
Mopaano	desa			Wakatobi
Umalaoge	desa			Cia-Cia Laporø, Cia-Cia Wabula, Cia-Cia Burangasi, Wakatobi
* Lasalimu ⁵³	desa	5° 15.087'	123° 9.565'	Lasalimu, Wakatobi, Wolio, Kulusu
Balimu ⁵⁴	desa			Bajau
Kinapani Makmur	desa			Cia-Cia Laporø, Wakatobi
Siomanuru	desa			Javanese, Balinese
Siontapina	desa			Wakatobi, Javanese
Rejo Sari ⁵⁵	desa			Javanese
Sangia Arano	desa			exodus from Amboñ
Sumber Agung	desa			Javanese
Wajah Jaya	desa			(unknown)
Mulia Jaya	desa			Wakatobi, exodus from Amboñ
Harapan Jaya	desa			Wakatobi, exodus from Amboñ

⁵¹ The dialect of Pancana spoken here is said to be similar to that of Wasuamba in the Lasalimu district.

⁵² District capital.

⁵³ Officially Lasalimu, but informally called Lasalimu Pantai to distinguish it from Lasalimu district.

⁵⁴ Split from Lasalimu village; the name Balimu is blended from Bajo + Lasalimu.

⁵⁵ Split from Siontapina village.

Appendix 3: Pronouns and person markers

For independent pronouns in other Butonic lects see Appendix 4, word list items numbers 055 through 061, also Figure 14 in the main text. Information has been drawn from the following sources: Lapandewa dialect of Cia-Cia (Van den Berg 1991c:313); Wasambua (Mead 2017c:36ff.); Kaisabu (Mead 2017a:36ff.); Kumbewaha (Mead 2017b:35ff.); and Lasalimu (Van den Berg 2003:100, Mead 2018:34ff.). Batu Atas forms are from field notes.

	Cia-Cia Lapandewa	Cia-Cia Batu Atas	Cia-Cia Wasambua	Kaisabu	Kumbe- waha	Lasalimu
1SG	inda?u	inda?u	ia?u	inda?u	ia?u	ia?u
1PL.INCL	ingkita	ingkita	ingkita	ingkita	ikita	ikita
1PL.EXCL	isami	isami	isami	isami	isami	isami
2SG	(i)so?o	iso?o	iso?o	isoo	iso?o	iso?o
2PL	isimiу	isimiу	isimiу	isomiу	isimiу	isimiу
3SG	ia	ia	o?ia, ia	oia	o?ia, ia	i?ia
3PL	mo?ia	mo?ia	moho?ia	mangaya ^(a)	mo?ia	mo?ia

(a) from plural marker *manga* plus third person pronoun *ia*, similar to Wolio *manga incia* ‘they’

Table A2. Independent pronouns in six Butonic lects.

	Cia-Cia Lapandewa	Cia-Cia Batu Atas	Cia-Cia Wasambua	Kaisabu	Kumbe- waha	Lasalimu
1SG	o- / a-	u-, o- / a-	o- / a-	a-	a-	a-
1PL.INCL	to- / ta-	to- / ta-	to- / ta-	tao- / ta-	to-	to- / ta-
1PL.EXCL	to- / ta-	to, toka- / ta-, taka-	to- / ta-	ta-	to-	to- / ta-
2SG	mu-, mo- / cu-	mu- / cu-	Ø- / Ø-	so-	Ø-	u- / si-
2PL	ka- / cuka-	mu-, ka- / cu-, cuka-	Ø- / ka-	ka-	i-	i-
3SG	no- / na-	no- / na-	no- / na-	no- / na-	no-	no- / na-
3PL	no(ka)- / na(ka)	no- / na-	no- / na-	no- / na-	no-	no- / na-

Table A3. Subject markers in six Butonic lects.

	Cia-Cia Lapandewa	Cia-Cia Batu Atas	Cia-Cia Wasambua	Kaisabu	Kumbe- waha	Lasalimu
1SG	-aa?u, -?u ^(a)	-a?u	-a?u	-a?u	-a?u	-a?u
1PL.INCL	-kita	-kita	-kita	-kita	-kita	-kita
1PL.EXCL	-sami	-sami	-sami	-sami	-sami	-sami
2SG	-so	-so	-so	-so	-so	-so
2PL	-simiu	-simiu	-simiu	-somiu	-simiu	-simiu
3SG	-?e, -e ^(b)	-e	-?e, -e ^(b)	-e	-?e	-?e
3PL	-?e, -e ^(b)	mo?ia	-?e, -e ^(b)	-e	mo?ia	-?e

(a) -?u follows stems ending in *a*, -aa?u elsewhere.

(b) -e following stems ending in *i, u*; -?e elsewhere

Table A4. Object markers in six Butonic lects.

	Cia-Cia Lapandewa	Cia-Cia Batu Atas	Cia-Cia Wasambua	Kaisabu ^(b)	Kumbe- waha ^(c)	Lasalimu ^(a)
1SG	-?isa?u	-sa?u ^(a)	-sia?u, -sina?u	soindau	-?asina?u	-?asuna?u
1PL.INCL	-?ikita	-kita ^(a)	-ikita	soingkita	-kita	-?asokita
1PL.EXCL	-?isami	-sami ^(a)	-asami	soisami	-?asami	-?asosami
2SG	-?iso	nggaso iso?o	-iso	soisoo	-?asoso	-?asoso
2PL	-?isimiu	nggaso isimiu	-isimiu, -asimiu	soisomiu	-?asimiu	-?asosimiu
3SG	-?isie	-sie ^(a)	-asine	so?oia	-?asene	-?ase?e
3PL	-?isie	-sie ^(a)	-asine	somangaya	-?asene	-?aso mo?ia

(a) alternatively *nggaso* plus the corresponding independent pronoun

(b) formed from *so* plus the corresponding independent pronoun

(c) initial syllable *?a* deletes when following a stem ending in *a*, e.g. *ala-sina?u* ‘fetch for me’.

Table A5. Indirect object markers in six Butonic lects.

	Cia-Cia Lapandewa	Cia-Cia Batu Atas	Cia-Cia Wasambua	Kaisabu	Kumbe- waha	Lasalimu
1SG	-?u	-?u	-?u	-?u	-?u	-?u
1PL.INCL	-nto	-nto	-nto	-nto	-nto	-nto
1PL.EXCL	-mami	-mami	-mami	-mami	-mami	-mami
2SG	-mu, -mo	-mu	-mu	-mu	-mu	-mu
2PL	-miu	-miu	-miu	-miu	-miu	-miu
3SG	-no	-no	-no	-no	-no	-no
3PL	-no (mo?ia)			-no (mangaya)	-no mo?ia	

Table A6. Possessive markers in six Butonic lects.

Appendix 4: Word lists

During the course of the survey we collected word lists in twenty-seven locations across southern Buton Island, Southeast Sulawesi, Indonesia.

Most of these word lists comprised 349 responses. The 349 items were selected especially for the Cia-Cia survey, therefore this list does not correspond to any previously used survey word list. However it includes all of the items of the Swadesh 100, 200 and 218 lists (as amended for the Austronesian context, see Martens 1989), the Austronesian Basic Vocabulary list, and Leipzig-Jakarta list.

An 844-item word list was collected in Wasambua, while 814-item lists were collected in the other northern tier lects (Kaisabu, Wakole, Wolowa, Kumbewaha, and Lasalimu) and in Masiri, Lapandewa, and Wali. However, in this appendix we report only the core 349 items. The full lists for the northern tier lects have already been published (Mead 2017a,b,c,d, 2018). In addition we are making all the word lists we collected available in their full forms in a companion Excel table.

Transcription and presentation of word list responses

We present responses using a phonemic transcription. Symbols have their expected IPA values with the following exceptions: the voiceless affricate /tʃ/ is symbolized in the word lists as *c* and the voiced affricate /dʒ/ is symbolized as *j*, while the approximant /j/ is symbolized as *y*.

(a) *Glottal stop*. Glottal stop is not symbolized in word-initial position. Nonetheless, with perhaps only a few exceptions, most words that are written as vowel initial can be assumed to begin with a hard (glottal stop) onset. In word medial position glottal stop is written wherever it was heard, even in cases where it may be automatically intercalated between like vowels. See further the discussion in § 6.6.

(b) *Stress*. Stress is not written on most words. It is predictable according to the following rules. These rules are illustrated here with data from Lasalimu, but they apply throughout the data set.

Primary stress falls on the penultimate syllable.

mata	['mata]	‘eye’
ontolu	[o'ntolu]	‘egg’
βo'laβo	[βo'laβo]	‘rat’
lokia	[lo'kia]	‘ginger’

When the first of two identical vowels in sequence receives stress, they are articulated as one long vowel.

luu	[lu:]	'tear' (from crying)
moma	[mo'ma:]	'to yawn'

Conversely, when the second of two like vowels is stressed, stress can be clearly heard on the second part:

kaancu	[ka'anču]	'there'
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Third person genitive *-no*, third person accusative *-e*, and other person and aspectual markers that occur in these data precipitate stress movement.

uβe	[?uβe]	'water'
uβeno	[?u'βeno]	'its water'

In longer words secondary stress can usually be heard on the fourth-from-the-last syllable. In words involving two-syllable reduplication, however, the first syllable of the reduplicated portion attracts secondary stress, whether it is the fourth- or fifth-from-the-last syllable. Note the following contrastive patterns:

kamia-mia	[ka,mia'mia]	'reflection'
limba-limba?a	[,limbali'mba?a]	'doorway'

In the few cases where it is not predictable according to one of these rules, stress is indicated.

(c) *Comments and multiple responses.* Comments are included in square brackets following the response.

ate [no glottal stop onset]	'liver'
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Sometimes a single word list item elicited multiple responses. This is indicated by separating the responses using a vertical bar (|). If known, differences in meaning are explained in comments.

boba [mouth, interior] ɲunsu [labial circle]	'mouth'
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In order to provide a full record as possible of these languages, we have never deleted word list responses. When it is clear that a word was a less appropriate response for that word list item, the response has sometimes been placed in a comment field, e.g.

taba [cf. jalubi 'roll of fat on the belly']	'fat'
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Word list metadata and responses

A three-letter code has been assigned to each of the twenty-seven word lists. Here follow other details about each list, followed by the word list responses themselves. For geographic locations see Figures 5 and 7 in the main text.

Code	Word List	Village, District, Regency	Language	Date	Respondent(s) (gender/age)
RNG	Rongi	Rongi, Sampolawa, South Buton	Cia-Cia	2015-08-13	La Musa (m54), La Haru (m62), La Dara (m62)
KOO	Kaongkeongkea	Kaongkeongkea, Pasarwajo, Buton	Cia-Cia	2015-09-05	La Halidi (m53), Wa Kate (f46), Lusna (f33), La Toto (m70), Wa Rina (f38)
LAP	Lapandewa	Lapandewa, Lapandewa, South Buton	Cia-Cia	2015-08-09	La Sonco (m39)
GND	Gonda Baru	Gonda Baru, Sorawolio, Kota Baubau	Cia-Cia	2015-08-13	Tahir Gade (m42), Ramsili (m42)
KRY	Karya Baru	Karya Baru, Sorawolio, Kota Baubau	Cia-Cia	2015-08-12	La Jarubi (m49), Ridwan (m48)
GSJ	Gunung Sejuk	Gunung Sejuk, Sampolawa, S. Buton	Cia-Cia	2015-08-09	Siti B. (f48), Naipere (f65), Wariundi (f47)
WAB	Wabula	Wabula I, Wabula, Buton	Cia-Cia	2015-08-21	La Umuru (m), La Suvu (m68), Rismawati (f32), La Dij (m59)
LWP	Liwumpacu	Koholimombono, Wabula, Buton	Cia-Cia	2015-08-21	Aliani (m26)
WAG	Wagola	Wagola, Pasarwajo, Buton	Cia-Cia	2015-08-27	Usman (m33), La Siari (m39)
KND	Kondowa	Kondowa, Pasarwajo, Buton	Cia-Cia	2015-08-27	La Damasi (m52)
TAK	Takimpo	Takimpo, Pasarwajo, Buton	Cia-Cia	2015-08-20	Sarlin (m31)
KAS	Kase	Wasampela, Wabula, Buton	Cia-Cia	2015-08-30	La Karudini (m35), Saharuddin (m43)
BAT	Batu Atas	Batu Atas Liwu, Batu Atas, South Buton	Cia-Cia	2015-08-17	La Ida (m47), La Bola (m~40), La Yusri (m34), La Asisi (m~38)
BAH	Bahari	Bahari, Sampolawa, South Buton	Cia-Cia	2015-09-05	La Ode Hajia (m62), La Jidi (m45), Wa Para (f36)
TIR	Tira	Tira, Sampolawa, South Buton	Cia-Cia	2015-08-14	La Surina (m40), La Hani (m39), Andri (m41)
BUR	Burangasi	Burangasi, Lapandewa, South Buton	Cia-Cia	2015-08-09	Jurlia (f22), Yulu (f33)
WAL	Wali	Wali, Binongko, Wakatobi	Cia-Cia	2015-09-01	Jaenuddin (m50)
BOL	Bola	Bola, Batauga, South Buton	Cia-Cia	2015-08-08	La Ganti (m60), La Ode Majulani (m41)
MBL	Mambulu	Jaya Bakti, Sampolawa, South Buton	Cia-Cia	2015-08-09	Wa Ode Makrifa (f38), La Ode Haori (m50)
BNG	Bangun	Bangun, Sampolawa, South Buton	Cia-Cia	2015-08-08	Marlia (f34)
MAS	Masiri	Masiri, Batauga, South Buton	Cia-Cia	2015-08-08	La Ode Muslim (m63), L.M. Mslim (m31), La Ode Asmin (m28)
WAS	Wasambua	Lakambau, Batauga, South Buton	Cia-Cia	2015-09-07	Hasnia (f42), Nurhaida (f38)
KAI	Kaisabu	Kaisabu Baru, Sorawolio, Kota Baubau	Kaisabu	2015-09-04	La Udu (m61)
WKL	Wakole	Kabawakole, Pasarwajo, Buton	Kumbewaha	2015-08-29	La Enti (m52)
WLW	Wolowa	Wolowa Baru, Wolowa, Buton	Kumbewaha	2015-08-28	Sumirwan (m42)
KMB	Kumbewaha	Kumbewaha, Siotapina, Buton	Kumbewaha	2015-08-25	Ishak S. H. (m), La Hedu (m), L. M. Kasim (m)
LLM	Lasalimu	Lasalimu, Lasalimu Selatan, Buton	Lasalimu	2015-08-22	Jabaluddin (m43), Alimuddin (m71)

	001 <i>kepala</i> head	002 <i>otak</i> brain	003 <i>rambut</i> hair (of head)	004 <i>dahi</i> forehead	005 <i>mata</i> eye	006 <i>kening, alis mata</i> eyebrow	007 <i>air mata</i> tear (from crying)
RNG	pocu	ota	βuluno pocu	βusa	mata	keſe	lu?uno mata
KOO	pocu	ota	βulu pocu	βusa	mata	keſe	lu?u
LAP	pocu	ota	βuluno pocu	βusa	mata	kere	lu?u
GND	pocu	ota	βuluno pocu	ende	mata	keſe	lu?uno mata
KRY	pocu	ota	βulu pocu	ende	mata	keſe	lu?u mata
GSJ	kabulaluno pocu	ka?ito	pocu	ende	mata	keſe	e?eno mata
WAB	pocu	ota	βuluno pocu	βusa	mata	kere	lu?u
LWP	pocu	ka?ito	βuluno pocu	βosa	mata	kere	lu?uno mata
WAG	pocu	ota	βulumpocu	βusa	mata	keſe	lu?u mata
KND	pocu	ota	βuuno pocu	βusa	mata	keſe	lu?uno mata / e?eno mata
TAK	pocu	ota / kaito	βulumpocu	βusa	mata	keſe	lu?u
KAS	pocu	ota	βulu pocu	ende	mata	kere	lu?uno mata
BAT	pocu	ka?ito	βulu	hula	mata	kere	lu?u mata
BAH	pocu	ka?oti	βulu pocu	βusa	mata	kere	lu?u
TIR	pocu	ota	βulu pocu	βusa	mata	kere	lu?u mata
BUR	pocu	ka?ito	banano pocu	βusa	mata	kere	lu?u
WAL	pocu	ka?ito	pocu	hula	mata	kire	lu?u
BOL	pocu	ka?ito	βu?u	βusa	mata	kere	lu?uno mata
MBL	pocu	ka?ito	βulu pocu	βusa	mata	kere	lu?u
BNG	pocu	ka?ito	βu?u	βusa	mata	kere	lu?uno mata
MAS	pocu	ka?ito	βu?u	βusa	mata	kere	lu?u
WAS	pocu	ota	vu?u	vusa	mata	keſe	lu?uno mata
KAI	potu	'si:to	βulumpotu	inde	mata	kexe	e?e mata
WKL	pocu	ota	βuluno pocu	ke?e	mata	kexe	lu?uno mata
WLW	ke?e	ota	pocu	βose	mata	kexe	lu?uno mata
KMB	ke?e	ota	pocu	βose	mata	kexe	lu?uno mata
LLM	ke?e	ito	pocu	βose	mata	kire	luu

	008 <i>hidung</i>	009 <i>ingus</i>	010 <i>pipi</i>	011 <i>mulut</i>	012 <i>bibir</i>	013 <i>lidah</i>	014 <i>gigi</i>
	nose	mucus	cheek	mouth	lip	tongue	tooth
RNG	ŋo?o	momo	hɪŋki	ňoba	βiβi	ela	ŋi?i
KOO	ŋo?o	momo	baga	ňoba / ŋuncu [labial circle]	βiβi	ela	ŋi?i
LAP	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
GND	ŋo?o	momo	baga	ňoba	vivi	ela	ŋi?i
KRY	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
GSJ	ŋo?o	momo	baga	ňoba	vivi	ela	ŋi?i
WAB	ŋo?o	βiri	baga	ňoba	βiβi	ela	ŋi?i
LWP	ŋo?o	βiri	baga	ňoba	βiβi	ela	ŋi?i
WAG	ŋo?o	βiŋi	baga	ňoba	βiβi	ela	ŋi?i
KND	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
TAK	ŋo?o	βiŋi	baga	ňoba	βiβi	ela	ŋi?i
KAS	ŋo?o	βiri	baga	ŋuncu	βiβi	ela	ŋi?i
BAT	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
BAH	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
TIR	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
BUR	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
WAL	ŋo?o	momo	baga	ňara	βiβi	ela	ŋi?i
BOL	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
MBL	ŋo?o	momo	baga	ňoba	βiβi	ela	ŋi?i
BNG	ŋo?o	momo	baga	ňoba	βiβi	lela	ŋi?i
MAS	ŋo?o	sopu	baga	ňoba	βiβi	lela	ŋi?i
WAS	ŋo?o	momo	baga	ňoba	vivi	lela	ŋi?i
		/ viŋi [if a lot]					
KAI	ŋoo	toli	baga	muncu	βiβi	ela	ŋii
WKL	ŋo?o	βixi	baga	ňoba	βiβi	ela	leke
WLW	oŋo	βixi	baga	ňoba	βiβi	ela	leke
KMB	oŋo	βixi	baga	ňoba / ŋuncu [labial circle]	βiβi	ela	leke
LLM	ňobo	βiri	pili	ňoba / ŋunsu [labial circle]	βiβi	ela	ŋinsi

	015 <i>geraham</i> molar tooth	016 <i>dagu</i> chin	017 <i>telinga</i> ear	018 <i>leher</i> neck	019 <i>bahu</i> shoulder	020 <i>tangan</i> hand, forearm
RNG	baŋka	hae	toliŋa	katoa	baŋku	lima
KOO	baŋka	hae	toliŋa	katoa	baŋku	lima
LAP	baŋka	hae	toliŋa	katoa	baŋku	lima
GND	vajka	hae	toliŋa	gonco	baŋku	lima
KRY	baŋka	hae	toliŋa	gonco	bobose	lima
GSJ	vajka	hae	toliŋa	gonco	bobose	lima
WAB	baŋka	hae	toliŋa	gonco	baŋku	lima
LWP	baŋka	hae	toliŋa	buŋku	baŋku / bobose	lima
WAG	baŋka	hae	toliŋa	laŋbuŋku	baŋku	lima
KND	baŋka	hae	toliŋa	buŋku	baŋku	lima
TAK	baŋka	daŋku	toliŋa	buŋku	baŋbuŋku	lima
KAS	baŋka	hae	toliŋa	buŋku	baŋku	lima
BAT	baŋka	daŋku	toliŋa	laŋbuŋku	baŋku	lima
BAH	baŋka	daŋku	toliŋa	katoa [front of neck] / poŋko [back of neck]	boŋku	lima
TIR	baŋka	daŋku	toliŋa	poŋko	baŋku	lima
BUR	baŋka	hae	toliŋa	katoa [front of neck] / poŋko [back of neck]	baŋku	lima
WAL	baŋka	daŋku	toliŋa	la?abuku	baŋku	lima
BOL	baŋka	daŋku	toliŋa	la?abuku	baŋku	lima
MBL	baŋka	daŋku	toliŋa	buŋku	baŋku	lima
BNG	baŋka	daŋku	toliŋa	katoa	baŋku	lima
MAS	baŋka	daŋku	toliŋa	buŋku	baŋku	lima
WAS	vajka	daŋku	toliŋa	gonco [front] / la?ano vuku [back of neck]	baŋku	lima
KAI	baŋka / timpa [canines]	hase	toliŋa	laabuku	buŋku	lima
WKL	baŋka	daŋku	culi	buŋku	baŋku	lima
WLW	baŋka	jaŋku	culi	buŋku	baŋku	lima
KMB	baŋka	ŋaxe	culi	buŋku	baŋku	lima
LLM	baŋka / lambaji [canines]	ade	culi	buŋku	baŋku	lima

	021 <i>kuku jari</i> fingernail	022 <i>punggung, belakang</i> back (person)	023 <i>susu, buah dada</i> breast	024 <i>perut</i> belly	025 <i>pusat</i> navel	026 <i>kaki</i> leg, foot
RNG	konusu	toñuku	cici	haβa	puhe	kake
KOO	konusu	taliku	cici	haβa	puhe	kake
LAP	konusu	taliku	cici	haβa	puhe	kake
GND	kunusu	toñuku	cici	haβa	puhe	kake
KRY	kunusu	taliku	cici	haβa	puhe	kake
GSJ	kunusu	taliku	cici	hava	puhe	kake
WAB	konuncu	toruku	cici	haβa	puhe	kake
LWP	kunusu	taliku	cici	haβa	puhe	kake
WAG	kunusu	toñuku	cici	haβa	puhe	kake
KND	kunusu	toñuku	cici	haβa	bunde	kake
TAK	konusu	toroku	cici	haβa	puhe	kake
KAS	konuncu	toruku	cici	haβa	puhe	kake
BAT	kunusu	toruku	cici	haβa	tuβuni	kake
BAH	konusu	taliku	cici	haβa	tuβuni	kake
TIR	kunusu	toruku / taliku	cici	haβa	tuβuni	kake
BUR	konusu	turuku	cici	haβa	tuβuni	kake
WAL	konusu	toruku	cici	haβa	toβuni	kake
BOL	kunisi	toruku	cici	haβa	tiβuni	kake
MBL	kunisi	poñko / bubuñko	cici	kompo	tiβuni	kake
BNG	kunisi	bu?u	cici	kompo	tuβuni	kake
MAS	kunisi	taliku [entire back] / toruku [upper back]	cici	kompo	teβuni	kake
WAS	konosu	bu?u	cici	hava	puhe	kake [includes lower leg]
KAI	kunisi	taliku	titi	haβa	puhe	kake
WKL	konusu	taliku	cici	haβa	pude	kake
WLW	konusu	taliku	cici	haβa	pude	kake
KMB	konosu	taliku	cici	haβa	pu?e	kake
LLM	konusu	taliku [entire back including tailbone] / toruku [does not include the lower back, which is part of one's tonja, waist]	cici	kompo	pu?e	kake

	027 <i>paha</i> thigh	028 <i>lutut</i> knee	029 <i>kulit</i> skin (person)	030 <i>(jaringan) daging</i> meat, flesh	031 <i>lemak</i> fat	032 <i>tulang</i> bone	033 <i>jantung</i> heart
RNG	paha	cu?u	sili	isi	taba	buku	bake
KOO	paha	cu?u	sili	isi	taba	buku	bake
LAP	paha	cu?u	sili	isi	taba	buku	bake
GND	paha	cu?u	sili	isi	taba	buku	bake
KRY	paha	cu?u	sili	isi	taba	buku	bake
GSJ	paha	cu?u	sili	isi	dalubi	buku	bake
WAB	paha	cu?u	sili	dage	taba	buku	bake
LWP	paha	cu?u	sili	isi	taba	buku	bake
WAG	paha	cu?u	sili	isi / dage	taba	buku	bake
KND	paha	cu?u	sili	isi	taba	buku	bake
TAK	paha	cu?u	sili	isi	dalubi	buku	bake
KAS	paha	cu?u	sili	dage	taba	buku	jantunj
BAT	paha	cu?u	sili	isi	taba	buku	bake
BAH	paha	cu?u	sili	isi	taba	buku	dadi
TIR	paha	cu?u	sili	isi	taba	buku	sina?a
BUR	paha	cu?u	sili	isi	taba	buku	bake
WAL	paha	cu?u	sili	isi	taba	buku	bake
BOL	paha	cu?u	kuli	isi	taba	buku	bake
MBL	paha	cu?u	kuli	isi	taba	buku	bake
BNG	paha	cu?u	kuli	isi	taba	buku	bake
MAS	paha	cu?u	kuli	isi	taba	buku	bake
WAS	paha	cu?u	kuli	isi	taba	buku	bake
KAI	paha	tuu	kuli	isi	taba	buku	bake
WKL	paha	cu?u	sili	isi	taba	buku	bake
WLW	paha	cu?u	siβa	isi	taba	buku	bake
KMB	paha	cu?u	sili	isi	taba [cf. dalubi ‘roll of fat on the belly’]	buku	bake
LLM	paa	cuu	siβa	ne?i	taba [cf. jalubi ‘roll of fat on the belly’]	buku	bake

	034 <i>darah</i> blood	035 <i>hati</i> liver	036 <i>empedu</i> gall, bile	037 <i>usus</i> intestines	038 <i>air kencing</i> urine	039 <i>tahi</i> excrement
RNG	fea	hate	hopiu	usu	le?e	taki
KOO	fea	hate	hopiu	ŋkalu-ŋkalu [cf. kabola ‘guts’]	le?e	taki
LAP	rea	hate	hopiu	paku-paku [entire] / kompabulu [large] / ŋkalu-ŋkalu [long]	le?e	taki
GND	aea	hate	hopiu	ŋkalu-ŋkalu	lele?e	taki
KRY	aea	hate	hopiu	paku-paku	əou	taki
GSJ	aea	hate	hopiu	kakadēseno hava	lele?e / əou	taki
WAB	rea	hate	hopiu	mpuru-mpuru	lele?e	taki
LWP	rea	hate	hopiu	pumpuru	lele?e	taki
WAG	fea	hate	hopiu	pumpuŋu	le?e	taki
KND	aea	hate	hopiu	mpuŋu-mpuŋu	le?e	taki
TAK	aea	hate	hapiو	pumpuŋu	lele?e	taki
KAS	rea	hate	hopiu	usu	lele?e	taki
BAT	rea	hate	hapiو	kaŋkalu	lele?e	taki
BAH	rea	hate	hopiu	ŋkalu-ŋkalu	lele?e	taki
TIR	rea	hate	hopiu	ŋkaŋkalu	lele?e	taki
BUR	rea	hate	hapiو	mpuru-mpuru / usu [< Malay]	lele?e	taki
WAL	rea	hate	hopiu	lempaku	lele?e	taki
BOL	rea	hate	piu	ŋkalu-ŋkalu	lele?e	taki
MBL	rea	hate	piu	kaŋkalu	lele?e	taki
BNG	rea	hate	piu	ŋkaŋkalu	lele?e	taki
MAS	rea	hate	piu	usu [< Malay]	lele?e	taki
WAS	χea	hate	pio	ŋkalu-ŋkalu	lele?e	taki
KAI	xea	hate	piu	ŋkalu-ŋkalu	lelee	taki
WKL	xea	hate	hopiu	ŋkalu-ŋkalu	lele?e	taki
WLW	xea	hate	piu	ŋkalu-ŋkalu	lele?e	taki
KMB	xea	hate	hopiu	ŋkalu-ŋkalu	le?e	taki
LLM	rea	ate [no glottal stop onset]	kampaki	ŋkalu-ŋkalu	uβeno le?e	taki

040	041	042	043	044	045
	<i>kemaluan laki-laki</i>	<i>keringat</i>	<i>orang</i>	<i>laki-laki</i>	<i>perempuan</i>
	penis	sweat (n)	person	man, male	woman, female
RNG	lau	hanci	mia	mohane	moβine
KOO	cikolu [polite] / taβu [coarse]	hanci	mia	mohane	moβine
LAP	lau	hanci	mia	mohane	moβine
GND	lau	hanci	mia	mohane	movine
KRY	kadu	hanci	mia	mohane	moβine
GSJ	kaβo?o	hanci	mia	mohane	movine
WAB	kođo / cikolu / lau	hanci	mia	mohane	moβine
LWP	taβu	hanci	mia	mohane	moβine
WAG	cikolu	hanci	mia	mohane	moβine
KND	cikou	hanci	mia	mohane	moβine
TAK	cikolu	hanci	mia	mohane	moβine
KAS	lau	hanci	mia	mohane	moβine
BAT	lau [penis] / cikolu [penis]	hanci	mia	mohane	moβine
BAH	cikolu	hanci	mia	mohane	moβine
TIR	cikolu	hanci	mia	mohane	moβine
BUR	cikolu	hanci	mia	mohane	moβine
WAL	cikolu	hanci	mia	mohane	moβine
BOL	cikolu	hanci	mia	mohane	moβine
MBL	cikolu	hanci	mia	mohane	moβine
BNG	cikolu / lau	hanci	mia	mohane	moβine
MAS	la?a cikolu	hanci	mia	mohane	robine
WAS	tavu	hanci	mia	mohane	movine
KAI	hobu	hanti	mia	mohane	moβine
WKL	cikolu	hanci	mia	mohane	moβine
WLW	lau	hanci	mia	mohane	moβine
KMB	cikolu	hanci	mia	mohane	moβine
LLM	taβu [entire] / laeno taβu [penis]	bara	mia	moane	βoβine
					moane

046	047	048	049	050	051
<i>isteri</i> wife	<i>bapak, ayah</i> father	<i>ibu</i> mother	<i>anak</i> child	<i>anak sulung</i> first born child	<i>anak bungsu</i> last born child
RNG	moβine	ama	ina	ana?ana	cumpe
KOO	moβine	ama	ina	uŋkaka	cumpe
LAP	moβine	ama	ina	uŋkaka	cumpe
GND	mancuana movine	ama	ina	uŋkaka	cumpe
KRY	moβine	ama	ina	uŋkaka	cumpe
GSJ	mancuana mvine	ama	ina	uŋkaka	cumpe
WAB	moβine	ama	ina	uŋkaka	cumpe
LWP	moβine	ama	ina	uŋka?uŋkaka	cumpe
WAG	mansuana moβine	ama	ina	ana	cumpe
KND	moβineno	ama	ina	ana	cumpe
TAK	moβine	ama	ina	a?ana	cumpe
KAS	mancuana moβine	ama	ina	ana	ana paŋulu
BAT	moβine	ama	ina	uŋkaka	cumpe
BAH	moβine	ama	ina	uŋkaka	cumpe
TIR	moβine	ama	ina	ana	cumpe
BUR	moβine	la?ama	βa?ina	uŋkaka	cumpe
WAL	moβine / mansuana moβine	ama	ina	ana	cumpe
BOL	moβine	ama	ina	ana	cumpe
MBL	mancuana moβine	ama	ina	ana?ana	cumpe
BNG	moβine	ama	ina	kaindai	cumpe
MAS	robine	ama	ina	ana	cumpe
WAS	movine	ama	ina	moha?ana	aka
KAI	moβine	ama	ina	ana	tumpe
WKL	moβineno	ama	ina	ana	cumpe
WLW	moβineno	ama	ina	ana	cumpe
KMB	moβine	ama	ina	ana	cumpe
LLM	βoβine	ama	ina	ana [old enough to play] / gorau [newborn through toddler]	cumpe

	052 <i>kakak laki-laki</i> older brother	053 <i>adik laki-laki</i> younger brother	054 <i>hamba, budak</i> slave	055 <i>aku, saya</i> I	056 <i>engkau, kamu</i> you (fam.)	057 <i>dia, ia</i> he, she	058 <i>kami</i> we (excl.)
RNG	aka-?aka	ai-?ai	bacua / ka?uŋkaβi [helper]	inda?u	iso?o	ia	isami
KOO	aka-?aka	ai-?ai	bacua	nda?u	so?o	ia	sami
LAP	aka	ai-?ai	bacua	inda?u	iso?o	ia	isami
GND	aka-?aka	ai?ai	bacua	inda?u	iso?o	ia	isami
KRY	aka-?aka	ai?ai	bacua	inda?u	iso?o	ia	isami
GSJ	aka-?aka	ai-?ai	bacua	inda?u	iso?o	ia	isami
WAB	aka-?aka	ai-?ai	bacua	inda?u	iso?o	ia	isami
LWP	aka-?aka	ai-?ai	bacua	indau	so?o	ia	sami
WAG	aka	ai	babu	inda?u	iso?o	sumii	isami
KND	aka-?aka	ai-?ai	bacua	indau	iso?o	oia	isami
TAK	a?aka	a?ai	bacua	indau	iso?o	oya	isami
KAS	aka-?aka	ai-?ai	bacua / cindala?a	inda?u	iso?o	ia	isami
BAT	aka-?aka	ai-?ai	babu	inda?u	iso?o	ia	isami
BAH	aka	ai	bacua	inda?u	iso?o	ia	isami
TIR	aka-?aka	ai	babu	inda?u	iso?o	ia	isami
BUR	aka-?aka	ai-?ai	bacua	inda?u	iso?o	ia	isami
WAL	aka	ai	bacua [cf. hata ‘servant, helper’]	nda?u	so?o	iaro	sami
BOL	aka	ai	bacua	inda?u	iso?o	ia	isami
MBL	aka-?aka	ai	bacua	iya?u	iso?o	ia	isami
BNG	aka	ai	bacua	iya?u	so?o	ia	sami
MAS	aka	ai	bacua	iya?u	iso?o	ia	isami
WAS	aka	ai	bacua	iya?u	iso?o	o?ia	isami
KAI	aka	ai	batua	inda?u	isoo	oia	isami
WKL	aka	ai	bacua	ia?u	iso?o	ia	isami
WLW	aka	ai	hata	ia?u	so?o	ia	sami
KMB	aka	ai	bacua	ia?u	iso?o	ia	isami
LLM	isa	ai	bacua	iya?u	iso?o	i?ia	isami

	059	060	061	062	063	064
	<i>kita</i>	<i>kalian</i>	<i>mereka</i>	<i>binatang</i>	<i>kerbau</i>	<i>tanduk</i>
	we (incl.)	you (plural)	they	animal	water buffalo	horn
RNG	ikita	isimiу	mo?ia	kadadi	kañambau	tandu
KOO	kita	simiu	mo?ia	kadadi	kañambau	tandu
LAP	iňkita	isimiу	mo?ia	kadadi	karambau	tandu
GND	ikita	isimiу	mo?ia	binata	kašambau	tandu
KRY	ikita	isimiу	mo?ia	binata	kašambau	tandu
GSJ	ikita	isimiу	mo?ia	binata	kašambau	tandu
WAB	ikita	isimiу	hamo?ia	kadadi	karambau	tandu
LWP	kita	simii	hoia	kakadaji	karambau	tandu
WAG	ikita	isimiuancu	ho?ia	binata	korobou [r confirmed]	tandu
KND	ikita	isimimu	hoia	kadadi	kašambau	tandu
TAK	iňkita	isimiу	hamoya	kakadadi	kašambau	tandu
KAS	ikita	isimiу	hamo?ia	kadadi	karambau	tandu
BAT	iňkita	isimiу	mo?ia	kadadi	korobou	tandu
BAH	iňkita	isimiу	mo?ia	kadadi	karambau	tandu
TIR	iňkita	isimiу	mo?ia	kadidi	'krba" [< Malay]	tandu
BUR	iňkita	isimiу	mo?ia	kadadi	korobou	tandu
WAL	sami / kita [respectful address for 2nd person]	simiu	mo?ia	kadadi	karambau	tandu
BOL	Iňkita	isimiу	maŋa?ia	kadadi	karambau	tandu
MBL	iňkita	isimiу	ŋa?ia	kadadi	karambau	tandu
BNG	iňkita	simiu	ŋa?ia	kadadi	karambau	tandu
MAS	iňkita	isimiу	maŋa?ia	binata	karambau	tandu
WAS	iňkita	isimiу	moho?ia [vowels are somewhat nasalized]	kadadi	kažambau	tandu
KAI	iňkita	isomiu	maŋaya	kadadi	kaxambau	tandu
WKL	iňkita	isimiу	hamo?ia	kadadi	kaxambau	tandu
WLW	kita	simiu	mo?ia	kadadi	kaxambau	tandu
KMB	ikita	isimiу	mo?ia	kadadi	kaxambau	tandu
LLM	ikita	isimiу	mo?ia	kadadi	karambau	tandu

	065 <i>ekor</i> tail	066 <i>burung</i> bird	067 <i>sayap</i> wing	068 <i>telur (ayam)</i> egg (chicken)	069 <i>bulu (ayam)</i> feather
RNG	pui	manu-manu	pani	cikolu	βulu
KOO	pui	manu-manu	pani	cikolu	βulu
LAP	kapui	manu-manu	pali	cikolu	βulu
GND	kapui	kakadadi	pani	cikolu	βulu
KRY	ka?isu	manu-manu / kakadadi	pani	cikolu	βulu
GSJ	ka?isu	kakadadi	pani	cikolu	vulu
WAB	pui	manu-manu	pani	cikolu	βulu
LWP	pui	kakadaji	pani	cikolu	βulu
WAG	pui	kadaji	pani	cikolu	βulu
KND	pui	kakadadi	pani	kocikou [probably a verbal form meaning 'having eggs']	βuu [cf. koβuu 'have feathers']
TAK	kapui	mamanu	pani	cikolu	βulu
KAS	pui	manu-manu	pani	cikolu	βulu
BAT	ka?isu	mamanu	pani	cikolu	βulu
BAH	ka?isu	manu-manu	pani	cikolu	βulu manu
TIR	kapui	mamanu	pani	cikolu	βulu
BUR	kapui / ka?isu	manu-manu	pani	cikoluno manu	βulu
WAL	ka?isu	kamanu-manu	pani	cikolu	βulu
BOL	lenci	manu-manu	pani	ontolu	βulu
MBL	kapui / ka?isu	manu-manu	pani	cikolu manu	βulu
BNG	ka?isu	ŋkamamanu	pani	cikolu manu	βulu
MAS	pui	manu-manu	pani	cikolu	βulu
WAS	ka?esu	manu-manu	pani	cikolu	vulu
KAI	lenci	manu-manu	pani	tikolu	βulu
WKL	kapui	kakadola	pani	cikolu	βulu
WLW	kapui	kakadola	pani	cikolu	βulu
KMB	kapui	manu-manu	pani	cikolu	βulu
LLM	ka?isu	manu-manu	pani	ontolu	βulu

070	071	072	073		074	075
	<i>kutu (kepala)</i> louse (head)	<i>nyamuk</i> mosquito	<i>lalat</i> fly	<i>semut</i> ant	<i>lipan</i> centipede	<i>labah-labah</i> spider
RNG	cucu	buko ^t oto	lale	sea	mulalano	kaŋka
KOO	cucu	buroto [r is confirmed]	lale	sea	mulalano	kaŋka
LAP	cucu	buroto	lale	sea	honipa	kaŋka
GND	cucu	bukoto	lale	sea	mlalano	kaŋka
KRY	cucu	bukoto	lale	sea	mlalano	kaŋka
GSJ	cucu	bukoto	lale	sea	nla:la:no	kaŋka
WAB	cucu	buroto	lale	sea	honipa	kaŋka
LWP	cucu	boroto	lale	sea	honipa	kaŋka
WAG	cucu	bofoto	lale	sea	honipa	kaŋka
KND	cucu	bukoto	lale	sea	maŋkai	kaŋka
TAK	cucu	bukoto	lale	sea	maŋkai	kaŋka
KAS	cucu	buroto	lale	sea	maŋkai	kaŋka
BAT	cucu	buroto	lale	sea	holipa	kaŋka
BAH	cucu	buroto	lale	sea	holipa	kaŋka
TIR	cucu	buroto	lale	sea	hunipa	kaŋka
BUR	cucu	buroto	lale	sea	hunipa	kaŋka
WAL	cucu	buroto	lale	sea	holipa	kaŋka
BOL	cucu	buroto	lale	sea	holipa	kaŋka
MBL	cucu	buroto	lale	sea	holipa	kaŋka
BNG	cucu	buroto	lale	sea	holipa	kaŋka
MAS	cucu	buroto	lale	sea	holipa	kanja
WAS	cucu	buxuto	lale	sea	maŋkai	— [people here usually say laba-laba < Malay]
KAI	tutuno potu	boxoto	lale	sea	molalano	laβa-laβa
WKL	kucu	buxoto	lale	sea	holipa	kanja
WLW	kucu	pepi	lale	sea	holipa	kalaŋka
KMB	kucu	buxoto	lale	kesu	holipa	ŋkalelema
LLM	kucu / kumoni [young lousenepi still whitish]		lale	kaleme?u [general] / kalimonsi [large, black, painful bite]	lipa	kalaŋka

	076 <i>cacing tanah</i> earthworm	077 <i>ular</i> snake	078 <i>ular sawa</i> python	079 <i>ikan</i> fish	080 <i>udang</i> shrimp	081 <i>udang karang</i> lobster
RNG	hendeleci	sa?a	sa?ano saβa	isa	milama	milama kamalea
KOO	kandeleci [initial k is confirmed]	kule	sa?a	isa	milama	milamano tai [animal not known in this area]
LAP	hendeleci	sa?a	bobolaβasulanjka	isa	uda [< Malay]	kura
GND	hendeleci	sa?a	sa?a	isa	milama	paŋko
KRY	hendeleci	sa?a	sa?a manu	isa	milama	—
GSJ	hendeleci	sa?a	baβalevasulanjka	isa	milama	—
WAB	hendeleci	sa?a	sa?a	isa	milama	kurampapa
LWP	hendeleci	sa?a	sa?a βasulanjka	isa	uda	kura?au
WAG	hendeleci / kule βuta	sa?a	sa?a βasulanjka	isa	melama	kuña?au
KND	hendeleci / kuleno βuta	sa?a	sa?a	isa	milama	kuña?au
TAK	hendeleci	sa?a	sa?a βasulanjka	isa	milama	urampapa
KAS	kule-kuleno βuta	sa?a	sa?a	isa	milama / kandaga	kurampapa
BAT	kandeleci	sa?a	sa?a	isa	milama	kura
BAH	kindeleci	sa?a	sa?a	isa	milama	kura
TIR	hendeleci	sa?a	sa?a	isa	milama / udanj	kura
BUR	hindeleci	sa?a	sa?a	isa	uda [< Malay]	kura
WAL	kandelecu	sa?a	sa?abata	isa	milama	kura
BOL	hindeleci	sa?a	bo, bola, βasu'lanjka	isa	nilama	koroura
MBL	kuleno βuta	sa?a	sa?a	kenta	milama	kuraura
BNG	hendeleci	sa?a	bolasulanjka	kenta	milama	koroura
MAS	hendeleci	sa?a	sa?a	kenta	melama	koroura
WAS	hundelecu	kule	, balu, vasu'lanjka	isa	melama	melama noloko
KAI	hundeletu	kule	saa	kenta	melama	koxouxa
WKL	hundeleci	saβa	saβa	ise	milama	xurampapa
WLW	hundeleci	kule	saβa	ise	kuxa	kuxampapa
KMB	hendeleci / kule-kule	saβa	saβa	ise	lelemo	xoxu
LLM	ŋgala-ŋgala	kule / lampolulu [poisonous snake about 30 cm long]	kule bola-bolasulanjka	ise	kura	roru

082	083	084	085	086	087
<i>katak</i>	<i>biawak</i>	<i>tikus</i>	<i>anjing</i>	<i>kucing</i>	<i>pohon</i>
frog	monitor lizard	rat, mouse	dog	cat	tree
RNG	puʃakaka	simbou	sibu	au	beka
KOO	kabaʃakaka	simbou	sibu	au	beka
LAP	puraa	simbou	sibu	au	beka
GND	puʃakaka	simbou	βulaβo	au	beka
KRY	puʃakaka	simbou	βulaβo	au	beka
GSJ	puʃakaka	simbou	vulavo	au	beka
WAB	purakaka	simbou	βulaβo	au	beka
LWP	purakaka	simbou	βulaβo	au	beka
WAG	puʃakaka	simbou	βolaβo	au	beka
KND	purakaka [<i>r</i> in this form confirmed]	simbou	βoaβo	au	beka
TAK	purakaka	simbou	βulaβo	au	beka
KAS	purakaka	simbou	βolaβo	au	beka
BAT	kodo	simbou	βulaβo	au	beka
BAH	purakaka	simbou	βulaβo	au	beka
TIR	purakaka	simbou	βulaβo	au	beka
BUR	purakaka	simbou	βulaβo	au	beka
WAL	kodo	simbou	βolaβo	au	beka
BOL	purakaka	simbou	βulaβo	mantoa	mbuta
MBL	burakaka	simbou	βulaβo	mantoa	mbuta
BNG	purakaka	simbou	βulaβo	mantoa	mbuta
MAS	purakaka	simbohu	βolaβo	mantoa	mbuta
WAS	kapurakaka	simbou	sibu	mantoa	mbuta
KAI	baʃakaka	simbou	sibu	dahu	beka
WKL	purakaka	simbou	βulaβo	kiau	beka
WLW	ka?a ~ kaa	simbou	βolaβo	kiau	beka
KMB	puxakaka	simbo?u	βolaβo	kiau	beka
LLM	ŋkaa	cimposu	βolaβo	ki ^y au	beka
					kau

	088	089	090	091	092	093
	<i>daun</i>	<i>cabang</i>	<i>batang</i>	<i>akar</i>	<i>tunggul (pohon)</i>	<i>kulit kayu</i>
	leaf	branch	trunk	root	tree stump	bark (tree)
RNG	fo?o	kampaña	la?a	pu?asa	kacumpu	silino sau
KOO	fo?o	ha?a	pukuano sau	pu?asa	kacumpu	silino sau
LAP	ro?o	hara	la?a	purasa	kacumpu	silino sau
GND	ko?o	xaha	la?a	pu?asa	kacumpu	hekano sau
KRY	ko?o	xaha	la?a	pu?asa	kacumpu	hekano sau
GSJ	ko?o	xajka	la?a	pu?asa	kacumpu	silino sau
WAB	ro?o	raha	la?a	purasa	kolocumpu	silino sau
LWP	ro?o	raha / kampaña	la?a	asa	kolocumpu	silinsau
WAG	fo?o	ha?a	la?a	pu?asa	kolocumpu	silinsau
KND	ko?o	xaha	la?a	pu?asa	kacumpu	silino sau
TAK	ko?o	haka / kampaña [large]	la?a	asa	kulicumpu	silino sau
KAS	ro?o	raha	la?a	purasa	kacumpu	silino sau
BAT	ro?o	raha	la?a	purasa	kacumpu	silino sau
BAH	ro?o	raha	la?a	purasa	kacumpu [cf. kancuna ‘sprout from stump’]	silino sau
TIR	ro?o	raha	la?a	purasa	kacumbu [small] / puenke [very large]	silino sau
BUR	ro?o	raha	la?a	purasa	kacumpu	silino sau
WAL	ro?o	raha	la?a	purasa	kacumpu	silino sau
BOL	ro?o	kanci	la?a	purasa	kacumpu	kulisau
MBL	ro?o	raha	la?a	purasa	kacumpu	kuli sau
BNG	ro?o	kanci	la?a	purasa	kacumpu	kulino sau
MAS	ro?o	kanci	la?a	purasa	kacumpu	kuli sau
WAS	xo?o	χaxa	la?a	kulese	kacumpu	kulino sau
KAI	xoo	xaha	laa	kulese	katumpu	kulino sau
WKL	xo?o	xaxa	la?βa	asa	kacumpu	silino sau
WLW	xo?o	xaxa	la?βa	asa	kacumpu	si?ano sau
KMB	xo?o	kampaña [main branch] / kampakampaña [branch]	la?βa	asa	kacumpu	silino sau
LLM	ro?o	kampaña [main branch] / raa [smaller]	lae	u?baka	cuko	si?ano kau

094	095	096	097	098	099
	<i>kayu</i>	<i>buah</i>			
	wood	fruit			
RNG	sau	βua	kambakamba / βuŋa	ɸui	kadese
KOO	sau	βua	bunjano	ɸui	kunde?e
LAP	sau	βua	bunja	rui	kunde?e
GND	sau	βua	kamba	ɪui	kunde?e
KRY	sau	βua	kamba	kaɸui	kunde?e
GSJ	sau	vua	bunja	ɪui	kunde?e
WAB	sau	βua	βuŋa	rui	kunde?e
LWP	sau	βua	kamba	rui	kunde?e
WAG	sau	βua	kamba	ɸui	kunde?e
KND	sau	βua	kamba	ɪui	kunde?e
TAK	sau	βua	kamba	ɸici	kunde?e
KAS	sau	βua	bunja	rui	kunde?e
BAT	sau	βua	kamba / bubuŋa	rui	kunde?e
BAH	sau	βua	kamba	karui	kunde?e
TIR	sau	βua	kamba	rui	kunde?e
BUR	sau	βua	kamba	rui	kunde?e
WAL	sau	βua	kamba	rui	kunde?e
BOL	sau	βua	kakamba	rui	kunde?e
MBL	sau	βua	kakamba	rui	kaluku
BNG	sau	βua	kamba	karui	kaluku
MAS	sau	βua	kamba	rui	kaluku
WAS	sau	vua	kamba	χui	kunde mocuka
KAI	sau	βake	kamba	kaxii	kunde [final vowel is not long]
WKL	sau	βake	kamba	xui	ŋane
WLW	sau	βake	kamba	xui	ŋane
KMB	sau	βake	kamba	xui	kaluku
LLM	kau	βake	βuŋa	rui	kaluku

100		101		102
	<i>bambu</i>		<i>rumbia</i>	<i>tepung sagu</i>
	bamboo		sago palm	sago flour
RNG	paÑaÑata		sagu	sagu
KOO	paÑaÑata / ßalo / ðama [small]		rombia [r is confirmed]	tabaÑo
LAP	paraÑata / ho?o [large, yellow] / ðama / pacu [largest]		sagu	tabaro
GND	balo [common] / paraÑata / pacu [yellow]		sagu	tabaxo
KRY	paÑaÑata [long internodes, thick] / balo [thick] / ho?o [large] / ðama [small] / pacu [very large]		xumbia	sagu
GSJ	paÑavata / pacu / ho?o / dama [small]		sagu	sagu
WAB	paraÑata [used for floors, fishing weirs] / mbalo [used for cooking rice] / ho?o / dama		sagu	tabaro
LWP	paraÑata		sagu	tabaro
WAG	paÑaÑata		sagu	tabaÑo
KND	paÑaÑata		sagu	tabaxo
TAK	ho?o [large] / paÑaÑata / tombula / usi?i [small] / pacu [largest]		sagu	tabaxo
KAS	paraÑata / ho?o / tombula / osi?i [small]		sagu	sagu
BAT	pareÑata / ho?o / dama		sagu	tabaro
BAH	pariÑata / ho?o / pacu [large] / ðama [small]		sagu	tabaro
TIR	paraÑata / dama [small] / tari / ho?o / pacu / ßalo		rumbia	tabaro
BUR	paraÑata [usual] / ho?o [yellow & thick; good] / ßalo		sagu	tabaro
WAL	ßemba [large] / ho?o [short internodes] / ßalo / ðama [small]		panasa [confirmed]	tabaro
BOL	paraÑata / ho?o / dama [small]		rumbia	tabaro
MBL	paraÑata / patu / ho?o / ðama		sagu	tabaro
BNG	paraÑata		sagu	sagu
MAS	paraÑata / ho?o [thick skin, small hole] / ðama [small]		rumbia	tabaro
WAS	ho?o [has short internodes, #7] / paÑavata [#1] / ðama [slender bamboo] / pacu [#5] / ßalo [used for cooking rice, #4]		xumbia	sagu
KAI	paxaÑata [not many stems] / hoo [many stems] / patu / tombula		xumbia	tabaxo
WKL	paxaÑata / lobu / kabataxi / osi?i [small]		sagu	tabaxo
WLW	paxaÑata / lobu / taxi / osi?i		sagu	tabaxo
KMB	paxaÑata / ßalo [used for cooking rice] / ho?o / ßulu		sagu	tabaxo
LLM	ßalo [thin] / paraÑata [thicker] / pacu [thickest] / kauro [small] / laleba		rumbia	tabaro

	103		104		105		106		107
	<i>rotan</i>		<i>jahe</i>		<i>ubi jalar</i>		<i>sirih</i>		<i>pinang</i>
	rattan		ginger		sweet potato		betel		areca nut
RNG	ɻauʃo		lokia		banda		kaʃo?o		panjana
KOO	ɻauʃo		lokia		banda		kaʃo?o [leaf and fruit]		panjana
LAP	rauro		lokia		kajaβa		karo?o		panjana
GND	ɻauʃo		lokia		kajaβa		gili / ɓite [fruit]		panjana
KRY	kue		lokia		kajaβa		gili / ɓite [fruit]		panjana
GSJ	ɻauʃo / kue [small]		lokia		kajava		gili		panjana
WAB	kue		lokia		katamana		gili		panjana
LWP	rauro		lokia		katela?ao		karo?o		panjana
WAG	ɻauʃo		lokia		katela?ao		kaʃo?o		panjana
KND	ɻauʃo		lokia		kasitela?ao		kaʃoko?o		panjana
TAK	ɻauʃo		lokia		katakalonda		kaʃoko?o / bite [fruit]		panjana
KAS	rauro		lokia		kanijaβa		karo?o		panjana
BAT	rauro		lokia		kajaβa		karo?o / bite [fruit]		panjana
BAH	rauro		lokia		kajaβa		karo?o / ɓite [fruit]		panjana
TIR	rauro		lokia		kajaβa		karo?o / ɓite [fruit]		panjana
BUR	rauro		lokia		kajaβa		karo?o		panjana
WAL	rauro		halia		kandijaβa		ɓite [leaf and fruit]		panjana
BOL	rauro		lokia		kaŋko		karo?o		panjana
MBL	rauro		lokia		kaŋko		karo?o		panjana
BNG	rauro		lokia		kaŋko		karo?o [leaf] / bite [fruit]		panjana
MAS	rauro		lokia		kanjora		gili		panjana
WAS	χauʃo		lokia		kandoŋa		kuŋu / ɓite [fruit]		panjana
KAI	xauxo		lokia		ŋkaoβi-oβi		gili / βeβulu [fruit]		panjana
WKL	xauxo		lokia		taŋko?io		kaxoxo?o		panjana
WLW	xauxo		lokia		taŋko?io		kaxoxo?o		panjana
KMB	kue		lokia		ŋkaβioβi		gili		βenkə
LLM	kue		lokia		kadeido		komba / kandina [fruit]		βenkə

108		109	110
	<i>cendawan, jamur</i>		
	mushroom		
RNG	ku?u	ka?umpu	buku
KOO	kululu	ka?umpu	buku
LAP	ku?u	ka?aβo	buku
GND	hulampi [on tree trunks] / kululu [ground, umbrella-shaped]	ka?umpu	kalulu
KRY	ku?u [grows singly] / hulampi [in clusters]	ka?aβo	kalulu
GSJ	kululu	ka?avo	buku
WAB	kululu / hulampi [different kind of fungus]	ka?aβo	buku / kalulu [classifier for counting fruit]
LWP	ku?u [on ground] / hulampi [on tree]	kaaβo	buku
WAG	ku?u	kaaβo	buku
KND	kuu / huampi	kaaβo	bukuno
TAK	kumbonua [toadstool, single] / kululu [toadstools growing in clusters] / hulampi [grows on trees]	'ka:βo	βacu
KAS	ku?u / hulampi [kululu is Wabula]	karumpu	βacu
BAT	holampi	ka?aβo	buku
BAH	ku?u [grows from ground] / holampi [grows on trees]	ka?aβo	buku
TIR	ku?u / hulampi	ka?aβo	buku
BUR	ku?u	ka?aβo	buku
WAL	ku?u / hulampi [grows on trees]	ka?aβo	buku
BOL	ku?u	ka?aβo	buku
MBL	ku?u	ka?aβo / karumpu	buku
BNG	ku?u	mao	buku
MAS	ku?u	karumpu	buku
WAS	ku?u	χumpu	ampole [with prefix a- 'one', cf. χoampole 'two seeds']
KAI	kuu	kaxuku	holompe
WKL	ku?u	βuli?i / ka?aβo	βacu
WLW	ku?u [singly] / bunantaxa [in clusters] / holempi [on tree trunks, edible]	βuli?i / xompo [tall]	βacu
KMB	ku?u / holempi	βoli?i	βacu
LLM	ku?u [small toadstool] / bujantara [k.o. large toadstool] / lempi [on tree trunks]	βoli?i	βacu

	111 <i>bibit (padi)</i> (rice) seedling	112 <i>jagung</i> corn	113 <i>matahari</i> sun	114 <i>bulan</i> moon	115 <i>bintang</i> star	116 <i>langit</i> sky
RNG	βine	katela	holeo	βula	βacuko	lanji
KOO	βine	katela	huleo [u is confirmed]	βula	βicuko	lanji
LAP	βine	kasitela	holeo	βula	βicuko	lanji
GND	vine	katela	holeo	βula	βicuko	lanji
KRY	βine	katela	holeo	βula	βicuko	lanji
GSJ	vine	katela	holeo	vula	vicuko	lanji
WAB	βine	katela	holeo	βula	βicuko	lanji
LWP	βine	kasitela	holeo	βula	biciko	lanji
WAG	bede / βine [original]	kasutela	holeo	βula	βicuko	lanji
KND	βine	kasitela	holeo	βua	βicuko	lanji
TAK	βine	kasitela	holeo	βula	βiciko	lanji
KAS	βine	katela	holeo	βula	βicuko	lanji
BAT	βine	gandu	holea	βula	βicuko	lanji
BAH	βine	gandu	huleo	βulaβo	βicuko	lanji
TIR	βine	gandu	huleo	βula	kalipopo / βicuko	lanji
BUR	βine	katela	huleo	βula	βicuko	lanji
WAL	βine	gandu	holeo [cf. omba holeo ‘sunrise’, motama holeo ‘sunset’]	βula	βicuko	lanji
BOL	βine	kahitela	holeo	βula	kalipopo	lanji
MBL	βine	katela	holeo	βula	kalipopo	lanji
BNG	βine	kasitela	holeo	βula	kalipopo	lanji
MAS	βine	kahitela	holeo	βula	kalipopo	lanji
WAS	vine	kahitela	holeo	vula	kalipopo	laya
KAI	βine	kahitela	matano holeo	βula	kalipopo	laiano
WKL	βine	katela	holeo	βula	βicuko	lanji [sky] / laya [up high]
WLW	βine	katela	holeo	βula	βicuko	laia
KMB	pembulo	katela	holeo	βula	βiciko	laia
LLM	pembulo	kaitea	leo	budo	mpio-mpio [also means firefly]	laiano

	117	118	119	120	121	122
	<i>awan</i>	<i>kabut</i>	<i>guntur</i>	<i>kilat</i>	<i>hujan</i>	<i>pelangi</i>
	cloud	fog	thunder	lightning	rain	rainbow
RNG	olu	gaβu	ɸundu	bebena	kia	ntoɸoße
KOO	olu	gaβu	ɸundu	bibito	kia	ntoɸuße
LAP	olu	gaβu	rundu	bibito	kia	ntorure
GND	olu	gaβu	ɹundu	bibito	kia	tokoße
KRY	olu	gaβu	ɹundu	bibito	kia	tokoße
GSJ	olu	gavu	ɹundu	bibito	kia	tokoße
WAB	olu	gaβu	rundu	bebena	kia	ntoroure
LWP	olu	gaβu	rundu	bebena	kia	toroure
WAG	olu	gaβu	ɸundu	baɸabete	kia	toɸouße
KND	ou	gaβu	ɹundu	bebena	kia	ntokouße
TAK	olu	gaβu	ɹundu	kila	kia	tokoße
KAS	olu	raɸuto	rundu	bebena [cf. berese ‘thunderbolt’]	kia	ntoroure
BAT	olu	kamu-kamu	rundu	kila	kia	ntoloure
BAH	olu	gaβu	rundu	kila [cf. barese ‘thunderbolt, crash of lightning’]	kia	ntoloure
TIR	olu	gaβu	rundu	kila	kia	ntoloure
BUR	olu	gaβu	rundu	kila / berese [lightning strike]	kia	βantoloure
WAL	olu	kamu-kamu	rundu	bebena	kia	tandara
BOL	olu	kamu-kamu	rundu / berese	kila	kia	ntoroure
MBL	olu	gaβu	rundu	berese / bibito [far-away lightning]	kia	ntorouße
BNG	olu	gaβu	rundu / barese [large crash]	kila	kia	ntoroure
MAS	olu	gaβu	rundu	kila	kia	ntorouße
WAS	olu	gavu	χundu	bibito [cf. ɸeχese ‘thunderbolt’]	hise	toχoße
KAI	ka?olu	gaβu	guntu	bibito	hise	toxooxe
WKL	olu	gaβu	guncu	bibito	monda	toxouxe
WLW	olu	gaβu	guncu	bibito	monda	toxouxe
KMB	olu	gaβu	boxuxu	bibito	monda	ntoxouße
LLM	ruto	gaβu	guncu	berese [makes noise] / βeβela [distant, does not make noise]	monda / ɻkunu-ɻkunu [light rain] / monda kadata [heavy rain day & night]	toro?uße

	123 <i>angin</i> wind	124 <i>laut</i> sea, ocean	125 <i>pasir</i> sand	126 <i>tanah</i> earth, ground	127 <i>garam</i> salt	128 <i>air</i> water
RNG	ŋoi	tai	hone	βuta	gaña	oe?e
KOO	ŋoi	tai	hone	βuta	gaña	e?e ~ oe?e ~ ^w e?e
LAP	ŋoi	tai	hone	βuta	gara	ee?e
GND	ŋoi	tai	hone	vuta	gasa	e?e
KRY	ŋoi	tai	hone	βuta	gasa	e?e
GSJ	ŋoi	tai	hone	vuta	gasa	e?e
WAB	ŋoi	tai	hone	βuta	gara	e?e
LWP	ŋoi	tai	hone	βuta	gara	e?e
WAG	ŋoi	tai	hone	βuta	gaña	e?e
KND	ŋoi	tai	hone	βuta	gasa	e?e
TAK	ŋoi	tai	hone	βuta	gasa	e?e
KAS	ŋoi	tai	hone	βuta	gara	e?e
BAT	ŋoi	tai	hone	βuta	gara	βe?e
BAH	ŋoi	tai	hone	βuta	gara	βe?e
TIR	ŋoi	tai / undalo [deep sea]	hone	βuta	gara	βe?e
BUR	ŋoi	tai	hone	βuta	gara	βe?e
WAL	ŋoi	tai	hone	βuta	gara	e?e ~ βe?e
BOL	kaβea	tai	hone	βuta	gara	oe?e
MBL	kaβea	tai	hone	βuta	gara	iy?e
BNG	kaβea	maβi / tai / ŋapa	hone	βuta	gara	βe?e
MAS	kaβea	maβi	hone	βuta	gara	^w e?e
WAS	kavea	mokahi	hone	vuta	gaxa	we?e
KAI	kaβea	mokahi	hone	βuta	gaxa	e?e
WKL	kaβea	tei	hone	βute	gaxa	e?e
WLW	kaβea	tei	hone	βute	gaxa	e?e
KMB	xibu	tei	hone	βute	gaxa	uβe
LLM	ribu	tei	komea	βute	gara	uβe

	129	130	131
	<i>gunung</i>	<i>hutan</i>	<i>sungai</i>
	mountain	woods, forest	river
RNG	gunu / toñuku	kañumpu	oe?e nto?oβa
KOO	toñuku	kañumpu [note: same as ‘grass’] / ponue [virgin forest]	w'e?e to?oβa [lit. ‘big water’]
LAP	gunu	buntou	kumele
GND	gunu	nuntou	kambasa
KRY	gunu	buntou	kambasa
GSJ	gunu	buntou	kumele
WAB	gunu [> 300m] / tombuku [< 300m]	buntou	kambara
LWP	gunu	buntou / kamocuka [used by old persons]	kambara
WAG	gunu	buntou	kambasa
KND	gunu	kamocuka	kumele
TAK	gunu	buntou	kuleme
KAS	gunu	buntou	kumele
BAT	gunu	karompo	kumele
BAH	gunu	karompu	kumele
TIR	gunu	karompu	kumele
BUR	turuku	buntou / kamocuka [used by old people]	kumele
WAL	gunu	karompu / kamocuka [jungle]	e?e βulu
BOL	gunu	kamocuka	raha
MBL	gunu	karumpu	kumele
BNG	gunu	karumpu / kamocuka	raha
MAS	gunu	kamocuka	hora
WAS	gunu	ponue	va?axa
KAI	kabumbu	ponue	e?e tooβa
WKL	tombuku / βoŋko	ponue [has large trees] / ome [previous garden]	kumele
WLW	βoŋko	ponue	kumele
KMB	gunu [mountain] / tombuku [hill]	xompo	kumele [large] / kambaxa [small]
LLM	gunu / toruku [tall mountain without trees] / kaboko [small, grassy rise]	ponue	minajra

	132		133	134	135	136	137
	<i>danau</i>		<i>api</i>	<i>asap</i>	<i>bara api</i>	<i>abu</i>	<i>debu</i>
	lake		fire	smoke	embers	ashes	dust
RNG	uecumambu [water that doesn't flow]		api	hau	βeano api	haβu	ŋaβu
KOO	teβeku [small, not a lake]		api	hau	haeo	haβu [cf. ŋaŋo 'fire litter that flies up in the air']	ŋaβu
LAP	—		api	hau	βea	haβu	gaβu
GND	kalebo		api	hau	vea	havu	gavu
KRY	kalebo [pooled water]		api	hau	βea	haβu	gaβu βuta
GSJ	—		api	hau	vea	havu	gavu
WAB	—		api	hau	βea	haβu	gaβu
LWP	talaga / kalende [small, from rain water]		api	hau	ŋalano api	haβu	gaβu
WAG	— [teβeku (small) / salanji ntooβa]		api	hau	ŋala	haβu	gaβu
KND	— [teβeku (small)]		api	hau	ŋa?ano api	haβu	gaβu / gaβuno βuta
TAK	talaga [large] / kalembu [collected runoff]		api	hau	kaβea	haβu	gaβu
KAS	'dana ^w [< Malay]		api	hau	βea	haβu	gaβu
BAT	topa		api	hau	βea	haβu	gaβu
BAH	—		api	hau	βea	haβu	gaβu
TIR	teβeku [small pool]		api	hau	βea	ŋaŋo	gaβu
BUR	teβuku [small waterhole between rocks in forest]		api	hau	βea	haβu	gaβu
WAL	—		api	hau	βea	haβu	gaβu
BOL	dano		api	hau	βea	habu	gaβu
MBL	talaga / hou		api	hau	βea	habu	gaβu
BNG	'dana ^w [< Malay]		api	hau	βea	habu	gaβu
MAS	talaga [small] / teβeku [small, between rocks]		api	humbo	βea	habu	gaβu
WAS	—		api	hau	veano api	habu	gavu
KAI	lembo		api	humbo	βeano api	habu	ŋaβu
WKL	—		api	hau	ŋala	haβu	gaβu
WLW	kalembo [small]		api	kau	ŋala	haβu	gaβu
KMB	—		api	ka?u	βea	haβu	gaβu
LLM	kalembo		api	ka?u	βeano api	ŋaβu	gaβu

	138	139	140	141	142
	<i>batu</i>	<i>kapur</i>	<i>bayang-bayang</i>	<i>rumah</i>	<i>tangga</i>
	stone	lime	shadow	house	ladder
RNG	loko	hapu	huluŋa	ka?ana	ea
KOO	loko	hapu	huluŋa	ka?ana	ea
LAP	loko	hapu	holuŋa	ka?ana	ea
GND	vacu	hapu	huluŋa	ka?ana	ea
KRY	βacu	hapu	huluŋa	ka?ana	ea
GSJ	vacu	hapu	huluŋa	ka?ana	ea
WAB	βacu	hapu	huluŋa	ka?ana	ea
LWP	βacu	hapu	huluŋa	kaana	ea
WAG	βacu	hapu	huluŋa	kaana	ea
KND	βacu	hapu	houŋa	kaana	ea
TAK	βacu	hapu	huluŋa	kana	ea
KAS	βacu	hapu	holuŋa	ka?ana	ea
BAT	loko	hapu	huluŋa	ka?ana	ka?e?ea
BAH	loko	hapu	huluŋa	ka?ana	ea
TIR	loko	hapu	huluŋa	ka?ana	ea
BUR	loko	hapu	huluŋa	ka?ana	ea
WAL	loko	hapu	holuŋa	ka?ana	ea
BOL	loko	hapu	kamia-mia	ka?ana	pularŋku
MBL	loko	hapu	ŋkamia-mia	banua	polanŋku
BNG	loko	hapu	kamimia	banua	pularŋku
MAS	loko	kaporø	ŋkamia-mia	banua	polanŋku
WAS	loko	hapu	kamia-mia	banua	polanŋku
KAI	βatu	hapu	ŋkamia-mia	kaana [cf. toŋa ata 'yard']	polanŋku
WKL	βacu	kepu	kamia-mia	βunua / ka?ana	oxe / ea
WLW	βacu	kepu	kamimia	βunua	oxe
KMB	βacu	kepu	ŋkamia-mia	βonua	oxe
LLM	tonduri	kepu	kaka?oluno [shadow] / kamia-mia [reflection]	sapo	ekata

143		144	145
	<i>pintu</i>	<i>atap</i>	<i>tiang rumah</i>
	door	roof	house post
RNG	kahompo / ɓoba [doorway]	hato	koʃi?i
KOO	kahompo	hato	koʃi?i
LAP	kahompo	hato	kori?i
GND	kahompo	hato	kobi?i
KRY	kahompo	hau [mistakenly recorded the response for asap 'smoke']	kusi?i
GSJ	kahompo	hato	kobi?i
WAB	kahompo / ɓoba [doorway]	hato	ori?i
LWP	kahompo / ɓoba [doorway]	hato	kacubo
WAG	kahompo	hato	kacubo
KND	kahompo	hato	ozi?i
TAK	kahompo	hato	uzi?i
KAS	kahompo [door leaf] / ɓoba [doorway]	hato	ori?i [kori?i is Wabula]
BAT	kahompo / ɓoba [doorway]	hato	kuri?i
BAH	kahompo	hato	kuri?i
TIR	kahompo	hato	kuri?i
BUR	kahompo	hato	kuri?i
WAL	kahompo	hato	kori?i
BOL	kajoli	hato	kori?I
MBL	kajoli	hato	kori?i
BNG	kahonto	hato	kuri?I
MAS	kahonto	hato	kori?i
WAS	kajoli [door leaf] / ɓoba [doorway]	hato	kuʒi?i
KAI	kajoli [door leaf] / ɓoba [doorway]	hato	koxihi
WKL	kahompo	hato	kori?i ~ koxi?i
WLW	kahompono ɓoba [door leaf] / kajoli [door leaf] / ɓoba [door opening]	hato	kuladi
KMB	hompono ɓoba [ɓoba itself refers to the door opening]	hato	oxi?i
LLM	kaunto [door] / limba-limba?a [door opening]	kotoβo	tadei

146		147	148
	<i>pagar</i>	<i>layar</i>	<i>rakit</i>
fence		sail	raft
RNG	pagala / tondo [garden]	panjaβa	aki
KOO	pagala / tondo [garden fence]	panjaβa	ɻaki
LAP	pagala	panjaβa	raki
GND	pagala / tondo [garden fence]	panjaβa	ɻaki
KRY	pagala / tondo [garden fence]	panjaβa	ɻaki
GSJ	tondo	panjava	raki
WAB	pagala [wood] / tondo [stone]	panjaβa	raki
LWP	pagala / tondo [in garden]	panjaβa	ɻarata
WAG	tondo	panjaβa	—
KND	pagaa / tondo	panjaβa	raki [r confirmed]
TAK	pagala [wood] / tondo [stone]	panjaβa	ɻaki
KAS	pagala	panjaβa	raki
BAT	pagara	panjaβa	raki [base only] / rompo [seaworthy]
BAH	pagala / tondo [dry stone wall]	panjaβa	raki
TIR	pagala	panjaβa	raki
BUR	pagala	panjaβa	raki
WAL	pagara	panjaβa	raki
BOL	pagala	panjaβa	raki
MBL	tondo	panjaβa	raki
BNG	pagala	panjaβa	raki
MAS	pagala	panjaβa	raki
WAS	pagala	panjava	ɻaki
KAI	tondo	panjaβa	xaki
WKL	pagala [members placed vertically] / tondo [members placed horizontally, also stone fence]	panjaβa	raki
WLW	pagala / tondo [garden fence]	panjaβa	xaki
KMB	pagala	panjaβa	raki / gusepa [bamboo tied together] / pincara
LLM	pagara [upright stakes] / tondo [logs laying flat] / kiki [interwoven bamboo] / kaβoβosu [fence made of hoops]	panjaβa	raki

	149		150		151		152		153		154
	<i>arang</i>		<i>lesung</i>		<i>parang</i>		<i>sarung parang</i>		<i>cincin</i>		<i>sisir</i>
	charcoal		mortar		machete		sheath for machete		ring (for finger)		comb
RNG	haeo		losu		padé		kasele		siŋkañu		kasuñu
KOO	haeo		losu		padé		kasele		siŋkañu		kasuñu
LAP	haeo		losu		padé		kasele		siŋkaru		kasuru
GND	haeo		losu		kacumpo		kasele		siŋkañu		kasuru
KRY	haeo		losu		kacumpo		kasele		siŋkañu		kasuru
GSJ	haeo		losu		kacumpo		kasele		siŋkañu		kasuru
WAB	ara / haeo [sooty deposit on pots]		losu		kacumpo		kasele		siŋkaru		kasuru
LWP	haeho		losu		kaβali		kasele		siŋkaru		kasuru
WAG	haeo		losu		kaβali		kasele		siŋkañu		kasuñu
KND	haeo		losu		kabali		kasele		siŋkañu		kasuñu
TAK	ara [from coconut] / hajeo [charred wood from fire] / haeo [charred wood]		losu		kabali		kasele		siŋkañu		kasuñu
KAS	ara		losu		kaβali		kasele		siŋkaru		kasuru
BAT	honeo		losu		pade		kasele		siŋkaru		kasuru
BAH	hajeo		losu		pade		kasele		siŋkaru		kasuru
TIR	hajeo		losu		pade		kasele		siŋkaru		kasuru
BUR	honeo		losu		pade		kasele		siŋkaru		kasuru
WAL	ŋaeo		losu		pade		kasele		siŋkaru		kasuru
BOL	honeo		losu		kapade		kasele		siŋkaru		kasuañi
MBL	ŋaeo		losu		kapulu		pahota		siŋkaru		kasuañi
BNG	heo		losu		kapulu		salu		siŋkaru		kasuañi
MAS	heo		losu		kapulu		kasele		siŋkaru		kasoañi
WAS	hio		nosu		kapulu		kasele		siŋkaχu		suavi
KAI	heo		nosu		kapulu		kasele		siŋkaxu		suañi
WKL	ŋaeo		nosu		kapulu		kasele		siŋkaxu		kasuxu
WLW	ŋaeo		nosu		kapulu		kasele		siŋkaxu		susuxu
KMB	ŋaeo		nosu		kaβali		kasele		siŋkaxu		kasuxu
LLM	ŋao		nosu		kaβali		sele		siŋkaru		siu

	155 <i>tali (besar, pintal)</i> rope	156 <i>jarum</i> needle	157 <i>jalanan</i> trail, road	158 <i>besar</i> big	159 <i>kecil</i> small (object)	160 <i>baik</i> good
RNG	ao	deu	lala	to?oβa	kakodi	umela
KOO	tali	deu	lala	to?oβa	kokodi	kakesa
LAP	tali / rabuta [from coir]	deu	lala	to?oβa	kokodi	bajija
GND	tali / kabuta [used on boats] / kaboke [for tying]	deu	lala	to?oβa	kokodi	umela
KRY	κabuta	deu	lala	to?oβa	kokodi	umela
GSJ	tali	deu	lala	to?ova	kokodi	umela
WAB	ao	deu	lala	to?oβa	kokodi	umela
LWP	ao / tali	deu	lala	tooβa	kokodi	mela
WAG	ao	deu	lala	tooβa	dedeku / kokodi	mela
KND	κabuta	deu	laa	tooβa	dedeku	mela
TAK	tali / kaboke	deu	lala	'to:βa	dedeku	mela
KAS	nilo / ao	deu	lala	to?oβa	kokodi	bajija
BAT	tali	deu	lala	to?oβa	kokodi	umela
BAH	tali / ao	deu	lala	to?oβa	kokodi	umela
TIR	tali	deu	lala	to?oβa	kokodi	umela
BUR	nilo / kaboke	deu	lala	to?oβa	kokodi	mela
WAL	nilo / kalabu	deu	lala	to?oβa	kokodi	umela
BOL	rabuta	surumba	lala	to?oβa	kikidi	umela
MBL	tali / rabuta [term used by old people]	sorumba	lala	to?oβa	kikidi	belo
BNG	rabuta	surumba	lala	to?oβa	kikidi	belo
MAS	tali	sorumba	lala	to?oβa	kikidi	belo
WAS	χambu	deu	lala	to?ova	diidi	belo [cf. belo lalono 'good hearted']
KAI	xabuta	deu	lala	tooβa	makidi-kidi	mela
WKL	tali nilo [nylon rope or fishing line] / kaboke	deu	lala	to?oβe	kokodi	umela
WLW	tali / kaxaxa [from tree bark] / kolo?io [from tree root]	deu	lala	to?oβe	kokodi / kikidi	umela
KMB	tali [cf. xojo 'headstrap']	deu	lala	to?oβe	kikici	umela / bajija
LLM	rojo	sorumba	lolo?o	to?oβe	kikidi	umela

	161	162	163	164
	<i>jahat</i>	<i>basah</i>	<i>kering</i>	<i>lebar</i>
	bad, evil	wet	dry	wide
RNG	kadai	kabeñe	mokata	kaleβa
KOO	kasega	kabuñu	kakata	kaleβa
LAP	ka?eje?eje [naughty]	kaburu	mokata	kaleβa
GND	mdai	mbusu [partially] / mbeñe [entirely]	mñinci	mleβa
KRY	daki	mbusu	ñinci	moleβa
GSJ	mhaki	mbusu	mñinci	mleva
WAB	maβaña	mobere	moñinci	moleβa
LWP	sega	mbere	kari?i	mleβa
WAG	sega [cf. also taa mela ‘not good’]	buñu / bñe	kari?i [r in this form confirmed]	leβa
KND	mosega	bñe	kari?i [r in this form confirmed]	moleβa
TAK	ka?eje	mbeñe	muñinci	moleβa
KAS	mosega	mobere	kari?i	moleβa
BAT	pideu	moburu	moñinci	moleβa
BAH	ma?eje?-eje / mohaña [naughty]	moburu	moñinci	moleβa
TIR	mosega	mobere	moñinci	muleβa
BUR	mosega	muñbere	muñinci	muleβa
WAL	mosega	mobere	moñinci	moleβa
BOL	maricu	morama	moñinci / karii	maheβa
MBL	mohaña	morama	mokele	moleβa
BNG	musega	murama	mukele	muleβa
MAS	modaki	morama	mokele	maheβa
WAS	moñikiu	moñama	mokele	maeva
KAI	modaki	bañka	mokele	moleβa
WKL	mosega	moñexe	moñinci	moleβa
WLW	mosega	mogodë	mokai	moleβa
KMB	koda?o	mojepe / motopa	moka?i	moβaxe
LLM	mosega [evil] / koda?o [bad, ruined]	moña?o	mokai	moβare

	165 <i>sempit</i> narrow	166 <i>jauh</i> far	167 <i>dekat</i> near	168 <i>baru</i> new (objects)	169 <i>tua</i> old (persons)
RNG	kaseke	kambilai	kake?esu	þukou	mancuana
KOO	kagimpi	kambolai	kake?esu	þukou	moncuana [cf. moncua'nam with completive marker]
LAP	kagimpi	kambilai	katumaŋku	þukou	mancuana
GND	mgimpi	mbelai	tataŋku	vukou	mancuana
KRY	gimpi	mbilai	tataŋku	þukou	mancuana
GSJ	maseke	mbelai	tataŋku	vukou	mancuana
WAB	mo?ipi	mbilai	ko?isu	þukou	mancuana
LWP	gimpi [original] / maseke [borrowed]	mbilai	koisu	þokou	mancuana
WAG	gimpi	mbilai	koisu	þukou	mansuana
KND	mogimpi	mbilai	koisu	þukou	mansuana
TAK	mugimpi	mbilai	tataŋku	þokou	mancuana
KAS	mogimpi	mbilai	koisu	þukou	moleŋo [people, things]
BAT	mo?ipi	mbelai	tataŋku	þokou	mancuana
BAH	maseke	mbilai	taŋku	þokou [vowel o in antepenultimate is confirmed]	mancuana
TIR	mogimpi / mo?ipi	mbilai	taŋku	þukou	mancuana
BUR	maseke	mbilai	tataŋku	þukou	mancuana
WAL	mo?ipi	mbelai	taŋku	þukou	mansuana
BOL	mogimpi	mbilai	tataŋku	þukou	mancuana
MBL	mogimpi	mbilai	tataŋku	þukou	mancuana
BNG	mugimpi	mbilai	taŋku	þukou	mancuana
MAS	maseke / mogimpi [tight fitting, of clothes]	mbelai	taŋku	þukou	mancuana
WAS	mogimpi	mbelai	taŋku	vukou	mancuana
KAI	moseke	mbilai	mosumpe	þukou	mancuana
WKL	mogimpi / mo?ipi	todo?o	motampi	þukou	mancuana
WLW	mogimpi	todo?o	motampi	þukou	mancuana
KMB	mogimpi	todo?o	motampi	þukou	mancuana
LLM	maseke	todo?o	motampi	þukou	mansuana

170	171	172	173	174	175
<i>tebal</i>	<i>tipis</i>	<i>panas (air)</i>	<i>dingin (air)</i>	<i>tumpul</i>	<i>tajam</i>
thick (object)	thin (object)	hot (water)	cold (water)	dull (knife)	sharp (knife)
RNG	kakapa	kanipi	kampana	kadindi	kaŋampa
KOO	kakapa	kanipi	kampana	kadindi	kaŋampa
LAP	kakapa	kanipi	kampana	kadindi	kaŋampa
GND	mkapa	mnipi	mpana	mdindi	mjaða
KRY	mkapa	mnipi	mpana	dindi	jaða
GSJ	mkapa	mnipi	mpana	mdindi	mkaða
WAB	mokapa	monipi	mompana	modindi	moŋampa
LWP	ŋkapa	nipi	sodo	modindi	ŋampa
WAG	kapa	nipi	mpana	jindi	ŋampa
KND	mokapa	monipi	mompana	modindi	moŋampa
TAK	mokapa	munipi	mpana	mudindi	moŋampa
KAS	mokapa	monipi	mompana	modindi [mogari is Wabula]	moŋampa
BAT	mokapa	monipi	mosodo	modindi	moŋaba
BAH	mokapa	monipi	mosodo	modindi	moŋampa
TIR	mokapa	munipi	musodo	mudindi	muŋaba
BUR	mukapa	munipi	mumpana	mudindi	muŋampa
WAL	mokapa	monipi	mosodo	modindi	moŋaba
BOL	mokapa	monipi	mosodo	modindi	mokaba
MBL	mokapa	monipi	mosodo	modindi	moŋaba
BNG	mukapa	munipi	musodo	mudindi	mukaba
MAS	mokapa	monipi	mosodo	modindi	mokaða
WAS	mokapa	monipi	mompana	modindi	cia nakoto [lit. ‘it’s not sharp’]
KAI	mokapa	monipi	mompana	modindi	nokoto
WKL	mokapa / mokobo		monipi	mompana	mokudo
WLW	mokobo		monipi	mompana	moxoko
KMB	mokobo		monipi	mompana	moŋampa
LLM	mokobo		monipi	mompana	motona
				mogaxi	mokaba
				mogari	mopapa

	176 <i>pendek</i> short (length)	177 <i>rendah</i> short (height)	178 <i>panjang</i> long (object)	179 <i>matang, masak (buah)</i> ripe
RNG	kago?ampu	kago?ampu	kako?ata	mtaha
KOO	kako?ampu	kako?ampu	kako?ata	kataha [cf. muta'ham with completive marker]
LAP	ko?ampu	kaka?ampu	ko?ata	motaha
GND	koko?ampu	koko?ampu	ko?ata	mtaha
KRY	ko?ampu	koko?ampu	ko?ata	muñiki
GSJ	koko?ampu	koko?ampu	ka?ata	mtaha
WAB	kaka?ampu	kaka?ampu	ko?ata	moriri [fruit] / mota?a [food]
LWP	kaampu	kaampu	ŋkoata	nta?a
WAG	kaampu	kaampu	koata	nta?a
KND	kakaampu	kakaampu	koata	mota?a
TAK	kakampu	mulimbu	koata	monta?a
KAS	kakalampu	kakalampu	ko?ata	mota?a
BAT	kukuđu	marerempe	ko?ata	momata
BAH	kukuđu	marerempe	ko?ata	montaha
TIR	đuduampu	marerempe	ko?ata	muntaha
BUR	ku?ampu	marerempe	ku?ata	muntaha
WAL	da?ampu	marerepa	ko?ata	mota?a
BOL	kukundo	mopanda	ŋko?ata	montaha
MBL	mompodo	mopanda	marambe	montaha
BNG	mupanda	mupanda	mulampa	mutaha
MAS	molimbu	mopanda	marambe	motaha
WAS	molimbu	mopanda	ko?ata	montaha
KAI	molimbu	molimbu	koata	motaă
WKL	molimbu	kaka?ampu	koata	mota?a
WLW	molimbu	molimbu	koata	mota?a
KMB	kumbaβa	kumbaβa	ko?ata	mota?a [cf. pepona?u 'nearly ready, e.g. cooked rice' momajka 'not yet truly ripe, e.g. mango']
LLM	makipu	kokombaβa	ma?eβa [also meaning 'broad']	mota?a

	180 <i>busuk</i> rotten (fruit)	181 <i>pahit</i> bitter	182 <i>manis</i> sweet	183 <i>asin</i> salty	184 <i>tuli</i> deaf
RNG	kabuto	kapaki	kameko	kahai	kapoŋke
KOO	kaboŋko [fruit] / kabuto [e.g. meat]	kapaki [final i voiceless]	kameko	kahai	kapoŋke
LAP	kabuto	kapaki	kameko	kahai	kapoŋke
GND	mbuto	mpaki	meko	mhai	mpoŋke
KRY	boŋko	mpaki	meko	mhai ~ muhai	mpoŋke
GSJ	mbuto	mpaki	meko	mhai	mpoŋke
WAB	moboŋko [fruit] / mobuto [fish, meat]	mopaki	momeko	mohai	mopoŋke
LWP	mbuto	mpaki	meko	hai	mpoŋke
WAG	boŋko	mpaki	meko	hai	poŋke
KND	mobuto	mopaki	momeko	mohai	mopoŋke
TAK	mbuto	paki	mumeko	mohai	mpoŋke
KAS	mobuto	mopaki	momeko	mohai	kapoŋko
BAT	mobuto	mopaki	momeko	mohai	moboŋo
BAH	moboŋko	mopaki	momeko	mohai	moboŋo
TIR	moboŋko	mupaki	mumeko	muhai	kaboŋo
BUR	mubuto / mubuŋku [esp. fruit]	mupaki	mumeko	muhai	kapoŋke
WAL	mobuto / molao / moboŋko	mopaki	momeko	mohai	moboŋo
BOL	mobuto [general, incl. meat] / moboŋko [fruits]	mopaki	momeko	mokara / mohai	moboŋo
MBL	mobuto	mopaki	momeko	mohai	moboŋo
BNG	mobuto	mupaki	mumeko	mukara	muboŋo
MAS	mobuto / moboŋko [fruit]	mopaki	momeko	mokara	moboŋo
WAS	mobuto	mopaki	momeko	mopaŋa	moboŋo
KAI	moboŋko	mopaki	momeko	mokaxa	mopoŋke
WKL	moboŋko / mobuto [smells rotten, has odor]	mopaki	momeko	mohai	poŋke
WLW	moboŋko [fruits] / mobosi [e.g. meat]	mopaki	momeko	mogaxa	mopoŋke
KMB	mobosi [general] / molau [of fish]	mopaki	momeko	mogaxa	mopoŋke
LLM	mobuto	mopaki	momeko	mogara	mopoŋke

	185 <i>sakit</i> pain, to be sick	186 <i>haus</i> thirsty	187 <i>lapar</i> hungry	188 <i>lain (orang lain)</i> other, different	189 <i>semua</i> all
RNG	sodo	kaŋjinci [lit. 'dry']	kahaŋo	aga?ano	sambalie
KOO	kalala / kopanaki	kaŋjinci	kahaŋo	aga?ano [cf. posalai 'different']	sambalie
LAP	kalala [smarting] / kopanaki [sick]	kaŋjinci [lit. 'dry']	kaharo	aga?ano	siaβuta?e
GND	kopanaki	mŋjinci [lit. 'dry']	mhaŋo	aga?ano	sambalie
KRY	mlala	moŋjinci [lit. 'dry']	mhaŋo	aga?ano	sambalie
GSJ	mlala	mŋjinci [lit. 'dry']	mhaŋo	aga?ano	sambambalie
WAB	kapanaki	moŋjinci βuku [lit. 'dry throat']	moharo	aga?ano	siaβuta?e
LWP	ŋkopanaki [sick] / lala [sharp pain]	ŋau βuku	haro	aga?ano	saβuta?e
WAG	lala [pinched] / kopanaki [sick]	ŋjinci	haŋo	agaano	sambai-mbalie
KND	moaa [e.g. pinched] / kopanaki [sick, sakit keras]	moŋjinci	mohaŋo	aga?ano	siaβuta-βutae
TAK	kopanaki	muŋjinci [lit. 'dry']	mohaŋo	aga?ano	saβutae
KAS	molala / panaki	moŋjinci	moharo	aga?ano	sambali-mbalie
BAT	kopanaki [sick] / molala [acute pain]	moŋjinci [lit. 'dry']	moharo	aga?ano	saβuta?e
BAH	molala / kopanaki	moŋjinci	moharo	aga?ano	siaβuta?e
TIR	kupanaki [sick] / mulala [acute pain]	muŋjinci [lit. 'dry']	muharo	aga?ano	saβuta?e
BUR	kupanaki [infection] / mulala [sharp pain, e.g. pinched]	muŋjinci [lit. 'dry']	muharo	aga?ano	kato?arue
WAL	molala / kopanaki	moŋjinci	moharo	aga?ano	saβuta?e
BOL	molala	moŋjinci [lit. 'dry']	moharo	aga?ano	babarie
MBL	molala	mokele [lit. dry]	moharo	aga?ano	bari-barie
BNG	mulala	mukele [lit. 'dry']	muharo	aga?ano	babarie
MAS	moreo [sick] / molala [hurt from pinch, wound]	mokele [lit. 'dry']	moħaro	aga?ano	babarie
WAS	mopanaki / mosodo	mokele	moχaŋo	aga?ano	satatana?e
KAI	molea [confer molea potu 'have a headache']	mokele	moħaxo	agaano	totoaxue
WKL	molea	moŋjinci βuku	moxaxo / moharo	olota	haβute?e
WLW	molea [cf. molea haβa = stomach ache]	mokaka βuku	moxaxo	olota	haβute-βute?e
KMB	posopanaki [sick] / molea [e.g. hit, pinched]	moŋasa	moħaxo	xaga?ano	haβute?e
LLM	molea	mocindo?u	moħaro	raga?ano	rajujunia?e

190	191	192	193	194
	<i>banyak</i>	<i>sedikit</i>	<i>beberapa</i>	<i>berat</i>
	many	few, little	some	heavy
RNG	kato?aſu	adede	popia	kaboa
KOO	kato?aſu	adaide	popia-popia	kaſoa
LAP	kato?aru	adeide	popia	kaboa
GND	to?aku	aide / akikide	popia	mboa
KRY	to?aku	akikide	popopia	boa
GSJ	to?ako	adede / aide	pipia	mboa
WAB	to?aru	aide-ide	popia	moba
LWP	toaru	aide / akikide	popopia	mboa
WAG	toaſu	akikide	popopia [cf. pia mia ‘how many people?’]	boa
KND	toaku	aideide	pia-pia	moba
TAK	to?aku	akikide	popopia	mboa
KAS	to?aru	aide	popopia	moba
BAT	dohata / to?aru	aide	popopia	moba
BAH	to?aru	aide	napopia	moba
TIR	to?aru	aide	popia / 'mincini' mea	moba
BUR	to?aru	aide	popopia	muba
WAL	to?aru	aidē	popopia	moba
BOL	bari	aide	popopia	moba
MBL	bari	aide	mintene	moba
BNG	to?aru / bari	aide	popia	moba
MAS	bari	aide	pia-pia	moba
WAS	to?aku	aidē	popia-popia	moba
KAI	toaxu	akide	nigaa?o	mobua
WKL	moide	hakuna	popia / hapena	mobue
WLW	moide	xakidi	popopia / xaxaapa	mobue
KMB	moide	hakici	pia-pia [cf. moide giu ‘many kinds’]	mobue
LLM	ŋkoruo	rakidi	popia	mobue
				mocika [cf. molui ‘somewhat yielding, e.g. tire’, and moloe ‘soft, e.g. sago porridge’]

	195	196	197	198
	<i>kotor</i>	<i>lurus</i>	<i>bulat (seperti bola)</i>	<i>halus, licin</i>
	dirty	straight	round (spherical)	smooth
RNG	kakotoro	kaʃonto	kalimbu	kandolu
KOO	kakoʃasi / kakotoro	kaʃonto	kalimbu	kamelo
LAP	ka?ini	karonto	kalimbu	kandolu
GND	kotoro	m̩konto	molimbu	halusu
KRY	m̩umbu / kotoro	m̩konto	mlimbu	sindolapu / ndolu [slippery]
GSJ	kotoro	m̩konto	mlimbu	malu
WAB	morumbu	moronto	molimbu	mondolu
LWP	rama	ronto	molimbu	ndolu
WAG	ʃama	ʃonto	limbu	ndolu
KND	jahana	moʃonto	molimbu	alusu
TAK	mundaji	muʃonto	malimboko / mlimbu	muhaɪndolu
KAS	kotoro	moronto	molimbu	alusu [cf. mondolu ‘slippery’]
BAT	kotoro	muronto	mabobolu	alusu
BAH	kotoro / korasi	moronto	mabobolu	mondolu
TIR	kotoro	moronto	molimbu	alusu
BUR	kurasi	muronto	boʃolu	alusu [smooth] / mundolu [slippery]
WAL	korasi	moronto	mabobolu	mondolu
BOL	korasi	moronto / makate	maðoðolulu / mbolole	mondolu
MBL	kotoro / morobusi	moronto	molimbu	mondolu
BNG	kotoro	muronto	mbolole	mundeli
MAS	morubu	makate	mbolole	halusu / mondeli [slippery]
WAS	moʃobu	mola?a	mandoo-ndoo	halusu
KAI	mobuxusi	moxonto	molimbu	alusu
WKL	moxumbu	moxonto	molimbu	mondolu
WLW	moxumbu	moxonto	buloli	halusu
KMB	moxumbu	molobu	molimbu	alusu
LLM	morumbu	mokate [cf. kelu ‘crooked’]	molimbu [cf. molae ‘oval’, gopa ‘irregularly shaped’]	alusu

199	200	201	202	203
<i>lekas, cepat</i>	<i>penuh</i>	<i>benar</i>	<i>putih</i>	<i>hitam</i>
fast	full (container)	true, correct	white	black
RNG masimba	mpono	banaña / kocuhu	kapute	kakito
KOO makidå	pono [cf. po'nom with compleptive marker]	kocuhu	kapute	kakito
LAP masimba	mompono	kocuhu	pute	kakito
GND masimba	mpono	banara	mpute	mkito
KRY masimba	mpono	banara	mpute	mokito
GSJ masimba	mpono	banara	mpute	mkito
WAB marimba / agori	mompono	kocuhu	mopute	mokito
LWP agori	mpono	ŋkocuhu	mpute	ŋkito
WAG mañimba	mpono	banara	mpute	kito
KND mañimba	mompono	banara [r is confirmed]	mopute	mokito
TAK masimbu	mpono	kocuhu	mpute	ŋkito
KAS marimba / masimba / makidå	mompono	banara	mopute	mokito
BAT maredé / marimba	mompono	taβa	mompute	mokito
BAH marimba	mompono	kocuhu	mopute	mokito
TIR maredé	mumpono	banara	mpute	mokito
BUR marimba	mumpono	taβa	mupute	mukito
WAL marimba	mompono	taβa	mopute	mokito
BOL agori	mempono	kocuhu / kana	mopute	mokito
MBL marimba	mompono	kana	mopute	mokito
BNG marimba	mumpono	kocuhu	mupute	mukito
MAS marimba	mompono	kocuhu	mopute	mokito
WAS maximba	mompono	kocuhu	mopute	mokito
KAI maximba	mompono	kotuhu	mopute	mokito
WKL maliga	buke	tocu?u	mopute	mokito
WLW maliga	buke	tocu?u	mopute	mokito
KMB agoxi	buke	tocu?u	mopute	mokito
LLM medoka [cf. mononoe 'slow']	buke	banara [correct] / tocu?u [verify] [cf. sala 'incorrect']	mopute	mokilo

	204 <i>kuning</i> yellow	205 <i>merah</i> red	206 <i>hijau</i> green	207 <i>tidak</i> not	208 <i>ada</i> there is, there are	209 <i>bukan</i> no
RNG	kaʃiʃi	kadea	kakanda	cia	dane?e	suano
KOO	kaʃiʃi	kadea	kaijo	cia	dane?e	suano
LAP	kariri	kadea	moijo	cia	dane?e	suano
GND	məʃiʃi	mdea	ijo	cia	dane?e	ncuano
KRY	məʃiʃi	modea	mokusi	cia	dane?e	ncuano
GSJ	məʃiʃi	mdea	ŋkusɪ	cia	dane?e	ncuano
WAB	moriri	modea	lumu	cia	dane?e	suano
LWP	riri	modea	kakanda	cia	dane?e	nsuano / mincuano
WAG	ʃiʃi	dea	ijo / kuʃi	taina	dane?e	suano
KND	məʃiʃi	modea	moijo	taina	dane?e	suano
TAK	məʃiʃi	mdea	mo?ijo	'taina	dane?e	ciano
KAS	moriri	modea	ijo [without glottal stop onset]	taina	dane?e	suano
BAT	moriri	modea	βuluβauri [green] / ɓabale [light green]	cia	dane?e	mincuano
BAH	moriri	modea	moijo	cia	dane?e	nciano
TIR	moriri	modea	moijo	cia	dane?e	muncuano
BUR	muriri	mudea	muijo	cia	ane?e	nciano
WAL	moriri	modea	moijo	cia	ane?e	ciano
BOL	moijo	modea	moijo	cia	dane?e	mincuano
MBL	moriri	modea	moijo	cia	dane?e	moncuano / nciano
BNG	muriri / muijo	modea	muranda	cia	dane?e	nciano
MAS	moriri	modea	moijo	cia	dane?e	mincuano
WAS	moijo	modea	moijo	cia	dane?e	muncuano
KAI	moŋkuni	modea	moijo	ta'ina ~ 'taina	danee [cf. da'ne:ʔo 'still is, still are']	mincuano
WKL	moxixi	modea	moijo	da?e	dane?e	mencuano
WLW	moxixi	modea	moijo	da?e	dane?e	mencuano
KMB	moxixi	moxea	moijo	da?e	dane?e	mincuano
LLM	moriri	mondera	moijo	isea	ane?e	mensuano

	210 <i>kalau, jika</i> if	211 <i>karena</i> because	212 <i>dan</i> and	213 <i>ini</i> this	214 <i>itu</i> that
RNG	ane	karena	mai	ine	incu
KOO	ane	saba'am	mai	ine	incu
LAP	ane	ane	mai	ine	ire
GND	ane	sababu	mai	nake?e	luma?ia / monke?e
KRY	ane	xampano	mai	na?ia	cuke?e
GSJ	ane	—	mai	na?ia	ncu?ia
WAB	ane	rampa	me	nake?e	cupke?e
LWP	ane	rampa	me	iana	iancu
WAG	ane	hagau	mai	iana	iancu / iaomai
KND	ane	asaa	mai	nake?e	cuke?e
TAK	ane	no	me	neke?e	cuŋke?e
KAS	ane	rampa	mai ~ me	nake?e	cupke?e
BAT	ane	haβane	mai	ine?e	incu?u
BAH	ane	pantea	mai	ina?a ~ ine?e	incue
TIR	ane?uka	ane?uka	mai	nake?e	incue
BUR	ane	mbulamo	mai	nake?e	ncua
WAL	ane	pantea	mai	na?e	iri?e
BOL	ane	hulanomo	mai	ina / ina?e [visible]	incu / incu?e [visible]
MBL	ane	hulanomo	mai	dina ~ di?ina	di?incu
BNG	ane	hulanomo	mai	nina / dina	incu
MAS	ane	hulanomo	se	di?ina	di?incu
WAS	ane	karena	se	inaa	incu / incu?e
KAI	ane	holanomo	bee	iina	iintu
WKL	ane	xampa	mai	niana	ancu
WLW	ane	xampa	mei	na?a	ancu
KMB	ane	hulanomo	me	nadia	lodia
LLM	ane / ane mpuu ['if possible', used politely]	sababuno	βe	naa	iancu

	215 <i>di sini</i> here	216 <i>di situ</i> there	217 <i>satu</i> one	218 <i>dua</i> two	219 <i>tiga</i> three
RNG	ka?ine	ka?incu	ise	dofua	totolu
KOO	ka?ine	ka?incu	amea	dofua	totolu
LAP	ka?ine	ka?ire	amea	dorua	totolu
GND	kanake?e	kalumai	amea / ise	dokua	totolu
KRY	ka?ina	ka?incu / kacuke?e	amea	dokua	totolu
GSJ	ka?ina	ka?incu	amea	dokua	totolu
WAB	kaina / naina	kaincu	amea / ise [if straight counting]	dorua	totolu
LWP	kaina	kaincu	amea	dorua	totolu
WAG	naina	naincu / kailoŋe	amea/ ise	dofua	totolu
KND	naina	naincu	amea / ise [if straight counting]	dokua	totou
TAK	kaina	kaincu / necuŋke?e	amea / ise	dokua	totolu
KAS	naina	naincu	amea	dorua	totolu
BAT	ka?ina	ka?incu	amea / ise [straight counting]	dorua / rua [straight counting]	totolu / tolu [etc.]
BAH	ka?ina	ka?incu	amea	dorua	totolu
TIR	ka?ina	ka?incu	amea	dorua	totolu
BUR	kanake?e	ka?incu	amea	dorua	totolu
WAL	ka?ina	ka?iri	amea	dorua	totolu
BOL	ka?ina	ka?incu	amea	dorua	totolu
MBL	ka?ina	ka?incu	amea	dorua	totolu
BNG	ka?ina	ka?incu	ame?ea	dorua	totolu
MAS	ka?ina	ka?incu	satu [straight counting] / ame?ea [counting things]	dorua	totolu
WAS	ka?ina	ka?incu	a?anu	doxua	totolu
KAI	ke?ana	ke?antu	aanu	xoanu	toluanu
WKL	nake?e	ncuke?e	xamea	doxua	totolu
WLW	niana	niancu	xamea	doxua	totolu
KMB	niana	niancu	hame?a / ise [if straight counting] / ha- [as in hatonde ‘one glass’, hapixi ‘one plate’]	doxua / xua [if straight counting]	totolu / tolu
LLM	kanaa	kaancu	ra?anu	dorua	totolu

	220 <i>empat</i> four	221 <i>lima</i> five	222 <i>enam</i> six	223 <i>tujuh</i> seven	224 <i>delapan</i> eight	225 <i>sembilan</i> nine	226 <i>sepuluh</i> ten
RNG	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
KOO	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
LAP	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
GND	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
KRY	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
GSJ	popaʔa	lolima	nonoʔo	popicu	oalu	siua	umpulu
WAB	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
LWP	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
WAG	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
KND	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompuu
TAK	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
KAS	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
BAT	popaʔa / paʔa	lolima / lima	nonoʔo / noʔo	popicu / picu	olau / βalu	siua	ompulu
BAH	popaʔa	lolima	nonoʔo	popicu	oβalu	siua	ompulu
TIR	popaʔa	lolima	nonoʔo	popicu	oβalu	siua	umpulu
BUR	popaʔa	lolima	nonoʔo	popicu	oalu	siua	umpulu
WAL	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
BOL	popaʔa	lolima	nonoʔo	popicu	oβalu	siua	ompulu
MBL	popaʔa	lolima	nonoʔo	popicu	oβalu	siua	ompulu
BNG	popaʔa	lolima	nonoʔo	popicu	βoβalu	siua	ompulu
MAS	popaʔa	lolima	nonoʔo	popicu	oβalu	siua	ompulu
WAS	popaʔa	lolima	nonoʔo	popicu	uvalu	siua	ompulu
KAI	patoanu	limaanu	nomoanu	pituanu	aluanu	siuanu	ompuluau
WKL	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
WLW	popaʔa	lolima	nonoʔo	popicu	oalu	siua	ompulu
KMB	popaʔa / paʔa	lolima / lima	nonoʔo / noʔo	popicu / picu	olau / oalu	siua / siua	ompulu
LLM	popaʔa	lolima	nonoʔo	popicu	oalu	sosia	ompulu

	227 <i>dua puluh</i> twenty	228 <i>lima puluh</i> fifty	229 <i>seratus</i> hundred	230 <i>seribu</i> thousand	231 <i>di</i> at	232 <i>kiri</i> left (hand/side)	233 <i>kanan</i> right (hand/side)
RNG	ɸuapulu	limapulu	ahacu	aʃiβu	i	sombali	soana
KOO	ɸuapulu	limapulu	ahacu	aʃiβu	i	sombali	suana
LAP	ruapulu	limapulu	ahacu	ariβu	i	sumbali	suana
GND	ɸuapulu	limapulu	ahacu	aʃiβu	i	sumbali	soana
KRY	ɸuapulu	limapulu	ahacu	aʃiβu	i	sumbali	suana
GSJ	ɸuapulu	limapulu	ahacu	aʃivu	i	sumbali	soana
WAB	ruapulu	limapulu	ahacu	ariβu	i	sombali	soana
LWP	ruapulu	limapulu	ahacu	ariβu	i	sumbali ~ sombali	soana
WAG	ɸuapulu	limapulu	ahacu	aʃiβu	i	sombali	soana
KND	ɸuapuu	limapuu	ahacu	aʃiβu	i	sombali	soana
TAK	ɸuapulu	limapulu	ahacu	aʃiβu	i	sumbali	suana
KAS	ruapulu	limapulu	ahacu	ariβu	i	sombali	soana
BAT	ruapulu	limapulu	ahacu	ariβu	i	sumbali	suana
BAH	ruapulu	limapulu	ahacu	ariβu	i	sumbali	soana
TIR	ruapulu	limapulu	ahacu	ariβu	i	sumbali	soana
BUR	ruapulu	limapulu	ahacu	ariβu	i	sumbali	suana
WAL	ruapulu	limapulu	ahacu	ariβu	i	sumbali	suana
BOL	raupulu	limapulu	ahacu	ariβu	i	sombali	soana
MBL	raupulu	limapulu	ahacu	ariβu	i	sombali	soana
BNG	ruapulu	limapulu	ahacu	ariβu	i	sumbali	suana
MAS	ruapulu	limapulu	ahacu	ariβu	i	sombali	soana
WAS	χoapulu	limapulu	amohono	aχevu	ve [e.g. ve banua 'in the house' ve oto 'in the car']	ema	suana
KAI	xoapuluanu	limapuluanu	ahatuauu	axiβuanu	i [e.g. i kaana 'at home']	sombali	soana
WKL	xuapulu	limapulu	xaxacu	xaxiβu	i	sombali	soana
WLW	xuapulu	limapulu	xaxacu	xaxiβu	i	sombali	soana
KMB	xuapulu	limapulu	hahacu	xaxiβu	i	sombali	soana
LLM	ruapulu	limapulu	raacu	rariβu	i	sombali	soana

234	235	236	237	238	239
	<i>barat</i>	<i>timur</i>	<i>di bawah</i>	<i>di atas</i>	<i>di dalam</i>
	west	east	under	on top of, above	inside
RNG	matabafa	cimburu	i βoɸu	i βaɸo	i haɸoa
KOO	baɸa	cimburu [r is confirmed]	i βoɸu	i βaɸo / i hocu [e.g. up in a tree]	i haɸoa
LAP	bara	cimburu	i βoru	i βaɸo	i haroa
GND	baka	cimburu	i βoɸu	i βaɸo	i haɸoa
KRY	baka / santamaka	mataholeo	i βaɪuaβa	i βaɸo	i haɸoa
GSJ	baka	cimbusu	i voɸu	i vavo	i haroa
WAB	bara	cimburu	i βoru	i βaɸo	i haroa
LWP	bara	cimburu	i βoru	i βaɸo	i bakaβa
WAG	baɸa	cimburu	i βoɸu	i βaɸo	i bakaβa
KND	baka	cimbusu	i βoɸu	i βaɸo	i haɸoa / i bakaβa
TAK	baka	cimu	i βoɸu	i βaɸo	i haɸoa
KAS	bara	cimburu	i βoru	i βaɸo	i haroa
BAT	bara	cimburu	i βoru	i βaɸo	i aroa
BAH	bara	cimburu	i βoru	i βaɸo	i aroa
TIR	bara	cimburu	i βoru	i βaɸo	i aroa
BUR	bara	cimburu	i βoru	i βaɸo	i haroa
WAL	bara	cimburu	i βoru	i βaɸo	i haroa
BOL	bara	cimburu	i βoru	i βaɸo	i aroa
MBL	bara	cimburu	i βoru	i βaɸo	i aroa
BNG	bara	cimburu	i panda	i βaɸo	i aroa
MAS	bara	cimburu	i panda	i βaɸo	i aroa
WAS	baχa	cimbuxu	ve voχu	ve bumbu	ve ayoa
KAI	βeβaxa	tetimbu	βe βoxu	te βaɸo	le xanda
WKL	бaxa	cimburu	i βui	i βaɸo	i xaxoa
WLW	бaxa	cimburu	i βui	i βaɸo	i laxoa
KMB	бaxa	cimu	i βui	i βaɸo	i xaxo
LLM	bara	cimu	i βui	i βaɸo	i aroa

240	241	242	243
<i>dengan</i>	<i>hari</i>	<i>malam</i>	<i>kemarin</i>
with	day	night	yesterday
RNG	mai	alo	hanoβia
KOO	mai	alo	hanoβia
LAP	mai	alo	hanoβia
GND	mai	alo	κondo-κondo [already night] / m̩ondo [dark]
KRY	mai	alo	hanuvia
GSJ	mai	alo	hanoβia
WAB	mai	alo	hanoβia
LWP	mai	alo	hanoβia
WAG	mai	alo	hanoβia
KND	mai	ao	hanoβia
TAK	mai	alo	hanoβia
KAS	mai	alo	hanoβia
BAT	mai	alo	hanoβia
BAH	mai	alo	hanoβia
TIR	mai	alo	hanoβia
BUR	mai	alo	hanoβia
WAL	mai	alo	hanoβia
BOL	mai	holeo / alo	hanoβia
MBL	mai	holeo	hanuβia
BNG	mai	holeo	hanoβia
MAS	se	holeo	hanoβia
WAS	se	holeo	hanuvia
KAI	þe [cf. ambu þe ieno? '(you) came with who?']	hoholeo	,haino'þia
WKL	mai	alo	noβia
WLW	mei	holeo [cf. xaholeo 'one day', xuaholeo 'two days']	noβia
KMB	me	holeo	xondo-xondo [cf. moki'i 'dark, as when electricity goes out']
LLM	þe	leo [but cf. raoleo 'one day', ruaoleo 'two days', toluoleo 'three days' etc.]	iβianai
		boŋi-þoŋi [cf. ramboŋi 'one night', ruamboŋi 'two nights' etc.]	

244	245	246	247	248
<i>besok</i>	<i>tahun</i>	<i>malu</i>	<i>takut (kepada)</i>	<i>menghitung</i>
tomorrow	year	ashamed, shy	to fear, be afraid of	to count
RNG	nabite	taku	maea	musasu
KOO	nabita	taku	kamaea	kasasu
LAP	nabita	taku	ka?alo-?alo	mosasu
GND	nambita	taku	maea	msasu
KRY	nabita	taku	maea	mosasu
GSJ	nambita	taku	maea	msasu
WAB	naibita	taku	ka?alo-?alo / maea	mosasu
LWP	nantalea	taku	ka?a?alo	nsasu
WAG	nabita / nantalea	taku	ka?ao-?alo	sasu
KND	naibita	taku	ka?ao-?ao	mosasu
TAK	nebita	taku	ka?alo	musasu
KAS	nabita	taku	ko?alo-?alo / maea	mosasu
BAT	nabite	taku	kaka?alo / maea	mosasu
BAH	nabita	taku	kaka?alo	mosasu
TIR	nabita	taku	ka?alo-?alo	musasu
BUR	nabita	taku	kola?alo	musasu
WAL	nabita	taku	ka?alo-?alo	mosasu
BOL	nabita	taku	maea	mosasu
MBL	nabita	taku	maea	montehi
BNG	na?ile	taku	maea	mutehi
MAS	na?ile	taku	maea	motehi
WAS	na?ile	taku	maea	montehi
KAI	naile	taku	ambanju	mosasu
WKL	naile	taku	maea	mosesu
WLW	naile	taku	maea	mosesu
KMB	na?ile [cf. mompe?ela ‘tomorrow morning (after sleeping)’]	βaha [cf. βaha haβahano ‘next year’, βaha diana?a ‘this year’]	ka?alo-?alo [cf. koli ka?alo-?alo ‘don’t be shy’]	mosesu
LLM	moinda	taku	maea	mosesu
				era

249	250	251	252	253	
	<i>berpikir</i>	<i>tahu (sesuatu)</i>	<i>kenal (orang)</i>	<i>memilih</i>	
	to think	to know (a thing)	to know a person	to choose	
RNG	pikiʃi	koni	koni	pili	pogau
KOO	pikiʃi	koni	koni	hule	pogau
LAP	piburi-buri	koni	koni	pili	pogau
GND	kopikiri	koni	koni	pileki	pogau
KRY	pikiʃi	koni	koni	pili	pogau
GSJ	pikiri	koni	koni	pili	pogau
WAB	buri-buri	koni	pokoni	pili	pigora-gora / poga-pogau
LWP	buburi	koni	koni	pileki	pugau
WAG	pikiʃi	koni	koni	pili	pogau
KND	pipikiri	koni	koni	pili / peeta	pogau
TAK	pikiʃi	koni	koni	pili	bisara
KAS	pikiri	koni	koni	pili	pogau
BAT	pikiri	koni	koni	pili	pogau / bisara
BAH	kopikiri	koni	koni	—	pogau
TIR	pikiri / pibuburi	koni	koni	pili	pugau / bisara
BUR	pipikiri	koni	koni	pili	pugao
WAL	pikiri / buri-buri	koni	koni	pili	bisara
BOL	pikiri	koni	koni	pili	pogau
MBL	pikiri	bora	bora	pili	pogau
BNG	pikiri	bora	bora	pili	pugau
MAS	pikiri	bora	bora	pili	pogau
WAS	pikiri	pande?e	pande?e [nopande?ea?u 'he knows me']	pilie	pogau
KAI	pikixi	koni	koni	pili	pogau
WKL	pikixi / kalencu	koni	koni	pili	boasa
WLW	pikixi	koni	koni	pili	pogau [speak] / boasa [utter, articulate]
KMB	posopikixi	pisene?e	pisene?e	pili	pogau
LLM	pikiri	pesene	pesene	pili	pogau

	254 <i>menyanyi</i> to sing	255 <i>menangis</i> to cry	256 <i>tertawa</i> to laugh	257 <i>mendengar</i> to hear	258 <i>melihat</i> to see	259 <i>mencium</i> to smell, sniff
RNG	pilagu	ke?e	þele	pindoþo	ita	piþono
KOO	lagu	ke?e	þele	pindoþo	ita	þono [cf. þobo ‘kiss’]
LAP	pilagu	ke?e	þele	pindoþo	ita	piþono
GND	pilagu	ke?e	þota?a	pindoþo	ita	piþono
KRY	pilagu	ke?e	þota?a	pindoþo	ita	piþono
GSJ	pilagu	ke?e	þota?a	pindoþo	ita	pivono
WAB	pilagu-lagu	ke?e	þeleþele	pindoþo	ita	piþono
LWP	pilagu	ke?e	þede	pindoþo	ita	piþono
WAG	pilagu	ke?e	þede	pindoþo	ita	piþono
KND	lagu	ke?e	þede	pindoþo	ita	piþono [cf. þobo ‘kiss on the cheek’]
TAK	pilagu	ke?e	þota?a	pindoþo	ita	piþono
KAS	pilagu	ke?e	pikahede	pindoþoi	ita	piþono
BAT	pilagu	ke?e	þota?a	pindoþo	ita	piþono
BAH	pilagu	ke?e	þota?a	pindoþo	ita	piþono
TIR	pilagu	ke?e	þota?e	pindoþo	ita	piþono
BUR	pilagu	ke?e	þota?a	pindoþo	ita	piþono
WAL	pilanju	ke?e	þota?a	pindoþo	ita	piþono [cf. þobo ‘kiss’]
BOL	pilagu	ke?e	þota?a	pindoþo	ita	piþono
MBL	pilagu	ke?e	þota?a	pindoþo	ita	piþono
BNG	pilagu	ke?e	þota?a	pindoþo	ita	puþondu
MAS	pelagu	ke?e	þota?a	rodoþo	ita	peþono [cf. peþondu ‘kiss’]
WAS	nolagu	noke?e	nobota?a	nohogono	no?ita?e	novondue
KAI	lagu	kee	sedeli [cf. pemboi ‘to smile’]	pendono	ita	peþono
WKL	pilagu	tanji [also ke?e < Cia-Cia]	þele	pindoþo	ita	piþono
WLW	pelalagu	tani	pomboi	pindoþo	ita	peþono [cf. þobo ‘kiss’]
KMB	lagu / pikabanci [quatrain]	tanji	pomboi	pindoþo	ita	piþono
LLM	lagu	tanji	pemboi	pendono	ita	peþono

	260 <i>memotong (kayu)</i> to cut (wood, across grain)	261 <i>membelah (kayu)</i> to split (wood)	262 <i>memasak</i> to cook	263 <i>membuka</i> to open, uncover	264 <i>makan</i> to eat
RNG	cumpo	boŋka	paʃeka	ambe	ma?a
KOO	cumpo [wood] / dodo [e.g. fish]	boŋka [with machete] / kaβulasi [with axe]	pitoʃo	leŋka / ambe [cf. kasoŋko 'lid']	ma?a
LAP	cumpo	boŋka	pitoro	leŋka	ma?a
GND	picumpo	piboŋka	piʃeka	ambe / buŋkale	ma?a
KRY	cumpo	boŋka [large object] / sekə [small object]	piʃeka	ambe	ma?a
GSJ	cumpo-cumpo	boboŋka	piʃeka	ambe	ma?a
WAB	cumpo	boŋka	pereka	ambe	ma?a
LWP	cumpo	boboŋka	pireka	buŋkale	ma?a
WAG	cumpo	boŋka	peʃeke	ambe	ma?a
KND	picumpo	boŋka	peʃeka	buŋkale	ma?a
TAK	cumpo	boŋka	pitoro	buŋkale	ma?a
KAS	cumpo / dodo	boŋka	pereka	ambe [also buka < Malay]	ma?a
BAT	cumpo	boŋka	pitoro / pireka	buka	ma?a
BAH	cumpo	boŋka	pitoro / pereka	leŋka	ma?a
TIR	cumpo	boŋka	pireka	buka	ma?a
BUR	tamba	boŋka	pereka	buka / leŋka	ma?a
WAL	dali	boŋka	pereka	leŋka	ma?a
BOL	cumpo	boŋka	potoro	leŋka	ma?a
MBL	cumpo	boŋka	pitoro	buŋkale	ma?a
BNG	picumpo	boŋka	pitoro	buka / leŋka	ma?a
MAS	pecumpo	peβeta	pepotoro	leŋka	ma?a
WAS	nokanda sau	noveta sau	pepopuko	leŋka?e	ma?a
KAI	petumpo	peboha	pepopoktaa	pelenka	maa
WKL	cumpo	boŋka	pitoro / pereka	ambe	ma?a
WLW	cumpo	boŋka	peponau	buŋkale	ma?a
KMB	kolو	βola	pipona?u	buŋkale	ma?a
LLM	βolo-βolo [original] / kokolo [borrowed]	βeβenka	pepona?u	buŋkale	mta ~ munta

265	266	267	268	269	270
<i>minum</i>	<i>menggigit</i>	<i>mencicipi</i>	<i>mengunyah</i>	<i>mengisap</i>	<i>meniup</i>
to drink	to bite	to taste (food)	to chew (not to swallow)	to suck (not nurse)	to blow (on fire)
RNG	poñoku	kañepu	pinami	pimunta	soñobo
KOO	poñoku	kañepu	pinami	pimunta	munco
LAP	poroku	kukuci	pinami	pimunta	sosopi
GND	puroku	keñepu	pinami	pimunta	pisosopi
KRY	poxoku	keñepu	pinami	pimunta	sosopi
GSJ	poxoku	keñepu	pinami	pimunta	sosopi
WAB	poroku	kukuci	pinami	pimunta	sosopi / gomi
LWP	poroku	kukuci	pinami	pimunta	sosopi
WAG	poñoku	kuci	pinami	pimunta	sosopi
KND	poxoku	kuci	pinami	pimunta	sosopi
TAK	puroku	kukuci	pinami	pimunta	gomi
KAS	poroku	kukuci	pinami	pimunta	gomi
BAT	poroku	kuci	pinami	pimunta	sonde
BAH	poroku	kuci	pinami	pijunte	pisorobo
TIR	poroku	kuci	pinami	pimunta	gomi
BUR	poroku	kukuci	pinami	pimunta	gomi
WAL	poroku	kuci	pinami	pimunta	gomi / sosopi
BOL	poroku	kerepu	pinami	pimunta	sosopi
MBL	poroku	papaki	pinami	pimunta	gomi ~ gogomi
BNG	puroku	karepu	pinami	pimunta	gomi
MAS	poroku	kerepu	penami	pemunta	pegomi
WAS	sumpu	papakie	penamie	pemunta?e	gomie
KAI	poxoku	papaki	penami	nañku	gomi
WKL	poxoku	kukuci	pinami	nañku	sosopi
WLW	poxoku	sagu	penami	nañku	sosopi
KMB	sumpu	kukuci	penami	pinajku	gomi
LLM	sumpu	kurapa	penami	nañku	gomi

	271 <i>menyala</i> to flame, blaze	272 <i>menunjuk</i> to point	273 <i>memegang</i> to hold	274 <i>memeras</i> to squeeze (in hand)	275 <i>jatuh</i> to fall, drop (as fruit)
RNG	lela	cui	unta / pidanda	peo	bua
KOO	lela	cui	unta	peo	bua
LAP	lela	cui	unta	peo	bua
GND	lela	cui	unta	peo	mdaβu
KRY	lela	cui	unta	peo	mdaβu
GSJ	lela	cui	unta	peo	mdavu
WAB	lela	cui	unta	peo	mondaβu
LWP	lela	cui	unta	peo	ndaβu
WAG	lela	cui	unta	peo	ndaβu
KND	lela	cui	unta	peo	mondaβu
TAK	lela	cui	unta	peo	mondaβu
KAS	sa?a	cui	unta	kopu?u	mondaβu
BAT	lela	cui	unta / pidanda	peo	mondaβu
BAH	lela	cui	pidanda	peo	cinanta [e.g. coconut] / mondaβu [person]
TIR	lela	cui	unta	peo	bua
BUR	lela	cui	unta	peo	bua
WAL	lela	cui	unta	peo	monanta [e.g. fruit] / mondaβu [person]
BOL	bena	cui	unta	pio	mondaβu
MBL	lela	cui	unta	pio	mondaβu
BNG	lela	cui	pi?unta	pio	mondaβu
MAS	kambea	cui	pe?unta	pepio	mondaβu
WAS	lela	susue	pe?unta	pio?e	mondavu / mokocibu
KAI	bombo	susu	unta	pio	mondaβu
WKL	lela	cui	unta	pio	mondaβu
WLW	gela	cui	unta [hold with the hand] / kopo [hold inside the hand/fist]	pio	mondaβu
KMB	se?e	cui	unta	pio	sikaβi
LLM	ruru	cui	onta	pio	monanta [e.g. coconut] / mondaβu [e.g. slip and fall down]

276	277	278	279
<i>menjatuhkan</i>	<i>bermain</i>	<i>bekerja</i>	<i>membakar (kebun)</i>
to drop	to play	to work	to burn (field)
RNG	pobua	bañaba	kañajaa
KOO	pobua	kadadaoa	kañajaa / kalencu
LAP	pobua	baraba	komiñku / karajaa
GND	pikondaþu	po?andea	pikañajaa
KRY	tabuña	bañoa	kañajaa
GSJ	pondavu	po?andea	kañajaa
WAB	pokondaþu	pikuri-kuri	karaja?a
LWP	pikundaþu	pikakukuri	karaja?a
WAG	kondaþu	pikakuikuñi	karaja?a
KND	pokondaþu	pikakukukí	kañaja?a
TAK	kundaþu	babañaba	kañajaa
KAS	pokondaþu	baraña	karaja?a
BAT	ponanta	baraba	pikarajaa
BAH	ponanta	baraña	komiñku
TIR	pubua / punanta	baraba	pikumiñku
BUR	pubua	baraña / poandea	pira / kumiñkua [work (n.), stem mijku 'move']
WAL	ponanta	baraña	pirae
BOL	pokondaþu	baraba / mogasia / poandea	karajaa / komiñku
MBL	pikondaþu	mogasia	karajaa / komiñku
BNG	pundaþu	pu?andea	pumiñku
MAS	pokondaþu	po?andea	pekomijku
WAS	tabuña?e	pekadao-daoa [stem daoa 'market']	kañajaa
KAI	pokondaþu	mogasia	kaxajaa
WKL	pokondaþu	po?andea / baraba	kaxaja?a
WLW	pokondaþu	po?andea	kaxaja?a
KMB	tabuxa?asene [with third person indirect object marker -?asene]	mohaja / kadadaxia	kaxajaa
LLM	nanta	peka?ina-?ina	karajaa
			cunu
			sula
			cunu
			picunu
			cunu
			cunu
			sula
			sula
			sula
			cunu
			sula
			pikasusula
			sula [cf. pikancunu 'grill, as fish']
			sula
			tampoi [e.g. trash] / sula [e.g. grass in the forest]
			cunu
			kancuncunu
			cunu
			pesula vuta
			petunu
			sula
			sule [cf. cunu 'grill, as fish']
			sule [cf. pecinaþu 'gather unburnt pieces of wood to burn again']
			sule / [cf. rampu 'grill, as fish']

280		281		282
	<i>menanam</i>		<i>tumbuh</i>	<i>menumbuk (padi)</i>
	to plant		to grow	to pound (rice)
RNG	tadu	cumbu	cucu	
KOO	pimbula [e.g. coffee] / tadu [e.g. corn]	cumbu [cf. cu'mbum with completive marker]	picucu	
LAP	pimbula [e.g. coconut] / pitadu [e.g. corn]	cuna	cucu	
GND	pontasu [rice, etc.] / cika [seed, e.g. corn]	cumbu	picucu	
KRY	pimbula [live plant] / cika [seed, e.g. corn, rice]	cumbu	picucu	
GSJ	picuka	cumbu	picucu	
WAB	pimbula [sprouted] / cika [seed]	cumbu	picucu	
LWP	pimbula [coconut] / cika [seed]	cumbu	picucu	
WAG	pimbula / cika [e.g. corn]	cumbu	cucu	
KND	pimbua [e.g. tree] / cika [e.g. corn]	cumbu	picucu	
TAK	cika	cumbu	picucu	
KAS	pimbula [e.g. coconut] / pilandu [e.g. corn]	cumbu	cucu	
BAT	pimbula / pitadu	cumbu	picucu	
BAH	pimbula [e.g. cassava, what already has a stem] / pitadu [e.g. corn]	cumbu	picucu	
TIR	pimbula	cumbu	cucu	
BUR	pitadu	cumbu	picucu	
WAL	pimbula / cika [plant wth dibble]	dudu [grow] / cumbu [sprout, e.g. coconut]	picucu	
BOL	pimbula / picika [plant with dibble]	cumbu	picucu	
MBL	pimbula [large] / picika [e.g. rice, corn, sorghum]	cumbu	cucu	
BNG	pimbula	cumbu	picucu	
MAS	pembula	cumbu	pecucu	
WAS	pembula	cumbu	pecucu	
KAI	pembula / tika [plant with dibble]	tumbu	petutu	
WKL	pimbula / tadu [e.g. corn]	cumbu / ido	cucu	
WLW	pembula [e.g. coconut] / tadu [e.g. corn] / pontasu [e.g. rice]	ido	cucu	
KMB	tadu [with dibble] / pimbula	ido	cucu	
LLM	pembula [e.g. cassava] / tadu [with dibble, e.g. corn, rice]	cumbu	cucu	

283	284	285	286	287
<i>melumatkan</i>	<i>hidup</i>	<i>mati</i>	<i>menggali</i>	<i>mendorong</i>
to crush	to live, be alive	to die, dead	to dig (hole)	to push
RNG	cucue pokofuta?e [pound it until fine]	dadi	mate	poŋali
KOO	ɸuta [cf. muɸu'tam with completive marker]	dadi	mate	puŋali
LAP	palana	dadi	mate	ponjali
GND	pikoβita	dadi	mate	ponjali
KRY	pepu	dadi	mate	ponjali
GSJ	pikomalu	dadi	mate	ponjali
WAB	kapaŋandu	dadi	mate	ponjali
LWP	pupuro [e.g. rice into rice flour]	dadi	mate	ponjali
WAG	piko?alusu / pahancuru	dadi	mate	ponjali
KND	pahalusu	dadi	mate	sese
TAK	kumalu	dadi	mate	ponjali
KAS	pokoruta	dadi	mate	gale
BAT	pokoruta	dadi	mate	pisese
BAH	puro	dadi	mate	pisese
TIR	pahalusu	dadi	mate	sese
BUR	poro?e	dadi	mate	puŋali
WAL	palana	dadi	mate	pisese
BOL	palana / purokoci	dadi	mate	seli
MBL	ɸitaki	dadi	mate	piseli
BNG	puroku	dadi	mate	seli
MAS	puro	dadi	mate	peseli
WAS	pokovita / pohancurue	mokuχi	mate	galue / polanji [dig a hole]
KAI	po?alusu	mokuxi	mate	peseli
WKL	pahancuru	dadi	mate	poŋali / seli
WLW	pahancuru	dadi	mate	seli
KMB	pxuo	dadi / mokuhi	mate	sali
LLM	puroki / pa?alusu	cumbu	mate	peŋaro
				juhxu
				jujurulai
				juhai [push person] / juju [push, e.g. furniture]
				jujurulai
				soro

	288 <i>menarik (sesuatu)</i> to pull	289 <i>mengikat, menambatkan</i> to tie (tether animal)	290 <i>berbelok</i> to turn (right/left)	291 <i>berputar</i> to turn around	292 <i>mengelap</i> to wipe
RNG	hela	ɓoke	ɓelo	putoli / putara	pilapu
KOO	hela	ɓoke	toli?isie	pipopokou	gigisi / lapu [< Malay]
LAP	soro / hela	ɓoke	pali	cigili	goso
GND	hela	ɓoke	toli	pajala	pilapu
KRY	hela	ɓoke	ɓelo	pikambululi	pigoso
GSJ	hela	ɓoke	bali	bulili	gigisi
WAB	hela	ɓoke	pali / ɓelo [< Malay]	pokou	gigisi
LWP	hela	ɓoke	bali / pali / palijku	mpokou	goso
WAG	hela	ɓoke	liŋku	pikou-kou	pigigisi
KND	hela	ɓoke	nopali	putara / bululi [turn around, change directions, as when sailing]	goso
TAK	hela	ɓoke	balili	popokou	gigisi
KAS	hela	ɓoke	pali	putara	goso
BAT	hela	ɓoke	pali	potili [e.g. top]	pigigisi
BAH	hela	ɓoke	pali	pokou	pigigisi
TIR	hela	ɓoke	pali	pokou	pigigisi
BUR	hela	ɓoke	pali	pokou	pigigisi
WAL	hela / soro	ɓoke	palisu	pokou	gigisi
BOL	hela	ɓoke	pali	pokou	gigisi
MBL	hela	ɓoke	pali	katimbululi	gigisi
BNG	hela	ɓoke	pali	gili	goso
MAS	hela	ɓoke	pali	patii	pegigisi
WAS	hela?e	ɓoke?e	balili	.pekapa'tii	lapue
KAI	hela	tapu	ɓelo	ti [intransitive] / patii [transitive] / soβo [to back up, equiv. to Malay mundur]	pegigisi
WKL	hela	ɓoke	ɓelo	putaxa	gigisi
WLW	hela	ɓoke	belo	pakaputaxa	gigisi
KMB	hela	ɓoŋko	belo	pokou / patii [make spin, e.g. patii?e mesin]	gigisi
LLM	hela	ɓoŋko	bulili / ɓelo [< Malay belok]	putara [< Malay putar]	gigisi

293	294	295	296	297	298
	<i>mencuci pakaian</i>	<i>menjemur (pakaian)</i>	<i>memandikan</i>	<i>berenang</i>	<i>mengapung</i>
	to wash clothes	to dry (clothes) in sun	to give someone a bath	to swim	to float
RNG	pitopa	pohai	baho	pikanaŋju	ampe
KOO	pitopa	pohai	baho	pikanaŋjo	pi?ampe-?ampe
LAP	pitopa	pohai	baho	pikanaŋju	ampe / lanto
GND	pitopa	pohai	pibaho	pikanaŋju	ampe
KRY	pitopa	pohai	pibaho	pikanaŋju	ampe
GSJ	pitopa	pohai	pibaho	pikanaŋju	ampe
WAB	pitopa	piholeai	baho	ponaju	ampe
LWP	pitopa	piholeo	pibaho	pikanaŋju	ampe / lanto
WAG	pitopa	piholeo	pibaho	pikanaŋju	lanto
KND	pitopa	piholeo	pibaho	pikanaŋju	pi?ampe-?ampe / pilanto-lanto
TAK	pitopa	piholeo	pibaho	pikanaŋju	lanto
KAS	pitopa	pipohai	baho	pikanaŋju	pilanto-lanto
BAT	pitopa	pohai	pibaho	pikanaŋju	lanto
BAH	pitopa	pohai	pibaho	pikanaŋju	lanto
TIR	pitopa	pohai	baho	pikanaŋju	palanto
BUR	pitopa	puhai	pibaho	pikanaŋju	lanto
WAL	pitopa	pohai	pibaho	pikanaŋju	palanto
BOL	pitopa	pohai	pibaho	ponaju	lanto
MBL	pitopa	pipohai	pibaho	pikanaŋju	lanto
BNG	pitopa	pohai	baho	pikanaŋju	lanto
MAS	petopa	pepohai	pebaho	ponaju	lanto
WAS	metopa	pepohai	pebaho?e	ponajo	pelanto-lanto
KAI	petopa	peholeo	baho	poŋano [verified]	lanto
WKL	pitopa / potapasi	piholeo	pibaho	pikanaŋju	lanto
WLW	petopa	peholeo	pebaho	soda ~ pekasosoda [medial d contrasts with soda 'soft drink']	lanto
KMB	petopa	piholeo	petambusi	leŋu	lanto
LLM	petopasi	peoleo	petambusi (gorau)	leŋu	lanto
					hendeci
					ekaci

299	300	301	302	303
<i>mendaki (gunung)</i> to climb (mountain)	<i>naik</i> to ascend	<i>bersembunyi</i> to hide	<i>berburu</i> to hunt (for game)	<i>memasang (jerat)</i> to set (traps)
RNG	paŋaŋa	hende	pikahoko	pikapipi
KOO	paŋaŋa	pikahende	pihoko	pikanto?o [for deer] / pikapipi [for chicken]
LAP	pañara	hende	pihoko	pika?ela / pitaho
GND	sukuŋi	hende	pikahoko	pika?ela
KRY	sukuŋi	hende	pikahoko	pitaho ka?ela
GSJ	hende	hende	pikahoko	pakana ka?ela [cf. pakana ‘do, make’]
WAB	pañaraci	hende	pihoko	pika?ela
LWP	toma	hende	pihoko	pitaho ka?ela / pika?ela
WAG	hende	hende	pihoko	pikaela
KND	hende	hende	pihoko	pika?ela
TAK	hende	hende	pihoko	pikaela
			pikulu / piŋusa [hunt deer] / piβaβi [hunt pigs]	
KAS	hende	hende	pikahoko	pika?ela
BAT	hende	hende	pihoko	—
BAH	pañara	hende	pihoko	taho
TIR	toma	hende	pihoko	pika?ela
BUR	pañara	hende	pihoko	pika?ela
WAL	pañara	hende	pihoko	pika?ela
BOL	saka	hende	pihoko	pitaho ka?ela / pika?ela
MBL	toma	hende	pihoko	taho
BNG	pañara	hende	pihoko	pitaho ka?ele [cf. ka?ele ‘trap’]
MAS	saka	hende	pehoko	petaho / peka?ela
WAS	taga kabumbu	mone	pehoko	petaho ka?ela
KAI	taga	hende	pehoko	petaho
WKL	hende	hende	pihoko	taho
WLW	taga	hende	peka?oko	taho
KMB	cumbuhi	hende	pika?oko	ta?o [cf. ka?inda ‘trap’]
LLM	pandake	eka	peka?oko	ta?o [cf. ka?ila ‘trap’]
			pajere	

304	305	306	307	308
<i>terbang</i>	<i>memanah</i>	<i>menikam</i>	<i>membunuh (orang)</i>	<i>melemparkan</i>
to fly	to shoot an arrow	to stab	to kill	to throw
RNG	leo	pipana	toboki	ponjko
KOO	leo	pipana	toboki	ponjko
LAP	leo / lola	pana	toboki	ponjko
GND	leo	pana	toboki	ponjko
KRY	leo	pana	toboki	ponjko
GSJ	leo	pana	toboki	ponjko
WAB	lola	pipana	toboki	ponjko
LWP	lola	pana	toboki	ponjko / komate
WAG	lola	pana	toboki	pikomate
KND	loa	pana	toboki	pokomate
TAK	lola	pipana	toboki	pikomate
KAS	lodo	pana	toboki	pokomate
BAT	lola	pipana	toboki	pokomate
BAH	lola	pipana	toboki	pikomate
TIR	lola	pana	toboki	ponjko / pikamate
BUR	lola	pipana	toboki	ponjko
WAL	lola	pana	tobo	pokomate
BOL	lola	pipana	toboki	pokomate
MBL	lola	pana	toboki	pikomate
BNG	leo	pipana	toboki	pikumate
MAS	horo	pepana	toboki	ponjko
WAS	hoho	pepana	tobo?e [cf. nocucue manu 'stab a chicken (in order to kill it)']	pokomate?e
KAI	lola	pepana	petobo	peponjko
WKL	lola	pipana	toboki	pikamate / ponjko
WLW	lola	pepana	toboki	pokomate
KMB	lola	pana	toboki	kumate
LLM	lola	pana	toboki [thrust forward] / cumbusi [plunge downward]	pokomate
				pebambexi
				pando
				bacika
				pikacika?asene
				pekacika

309	310		311	312
	<i>memukul (dengan sesuatu)</i>	<i>berkelahi</i>		<i>membuat</i>
	to hit (with a stick, club)	to fight		to make
RNG	βoβa	pogiña / pocumbu	mbolaku	pakana
KOO	ɓembe / ɓabasi	pogiña / pocumfoxbu	mbulaku	pañabua / pokana
LAP	bebe	pogira	mbolaku	pigau
GND	ɓebe	pogiña	mbolaku	pakana
KRY	ɓebe	pugiña	mbolaku	pigau / pipande [do competently]
GSJ	ɓebe	pogiña	mbolaku	pakana
WAB	βoβa [w/ instrument] / ɓebe [w/ hand]	poraso	mbolaku	pakana
LWP	βoβa	pogera [with words] / pocumbu [physical]	mbolaku	pokana / pirabu
WAG	βoβa	pocumbu	mbolaku	pigau
KND	βoβa [use wood] / ɓabele [use wood, hand, etc.]	pogera [verbal] / pocumbu [physical]	mboaku	piñabu
TAK	βoβa	picumbu / pogiga [with words]	mbolaku	piñabu
KAS	ɓebe	pogira [quarrel] / pocumbu [physical]	mbolaku	pigau / pirabu / pakana
BAT	βoβa	podole [general] / pocumbu [fistfight]	mbolaku	piñbau [original] / pigau [borrowed]
BAH	ɓebe	pogera [quarrel] / podole [physical]	mbolaku	pigau
TIR	ɓebe	pogera	mbolaku	piñbau
BUR	ɓebe	pocumbu [physical] / pogera [words only]	mbolaku	pakana / piñbau
WAL	rambi / ɓebe	pogera [quarrel] / poʔanu [physical] / pocumbu [physical]	mbolaku	piñbau
BOL	bebe	pobusu [physical] / pogera [words only]	mbolaku	pigau
MBL	ɓebe / βoβa	pogera	mbolaku	pigau / piñbau [e.g. cake]
BNG	ɓebe	pugera	mbulaku	piñbau
MAS	ɓebe	pobusu [physical] / pogera [non-physical]	mbolaku	peñbau
WAS	vesie	pogexa	mbolaku	kajaja?
KAI	pehadó	pogexa [quarrel] / pobusu [with fist] / potopa [slap]	mbolaku	pekaxajaa
WKL	pikabébe	pogexa / potagali	mbolaku	pikaraja?a / piñbau
WLW	pomako	pogixa [quarrel] / pobusu [physical]	mbolaku	pekaxaja?a / peñbau
KMB	ɓebe	pogixa [with words] / pobusu [physical]	mbolaku	piñbau
LLM	palu	pogira	polaku	peñbau

	313 <i>menjahit</i> to sew	314 <i>menyapu</i> to sweep	315 <i>membeli</i> to buy	316 <i>menjual</i> to sell	317 <i>mengambil</i> to take	318 <i>memberi</i> to give	319 <i>membawa</i> to bring, carry
RNG	pideu	pisambu <small>ße</small> e	holi	aso	ala	bicu	ba <small>β</small> a
KOO	pideu	pisambu <small>ße</small> e	holi	aso ~ pa <small>ñ</small> a <small>?</small> aso	ala	bicu	ba <small>β</small> a
LAP	pideu	pisambure	balu	aso	ala	d <small>ã</small> βu	ba <small>β</small> a
GND	pideu	pisambu <small>ße</small> e	holi	aso	ala	d <small>ã</small> βu	ba <small>β</small> a
KRY	pideu	pisambu <small>ße</small> e	holi	aso	ala	d <small>ã</small> βu	ba <small>β</small> a
GSJ	pideu	pisambu <small>ße</small> e	holi	aso	ala	davu	bava
WAB	pideu	pisambure	holi	aso	ala	d <small>ã</small> βu	ba <small>β</small> a
LWP	pideu	pisambure	balu	para <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a
WAG	pideu	pisambu <small>ße</small> e	balu	pa <small>ñ</small> a <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a
KND	pideu	pisambu <small>ße</small> e	holi	paraaso / aso	aa	d <small>ã</small> βu	ba <small>β</small> a
TAK	pideu	pisambu <small>ße</small> e	holi	paraaso	ala	d <small>ã</small> busi	ba <small>β</small> a
KAS	pideu	pisambure	holi	para <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a
BAT	pideu	pisambure	balu	para <small>?</small> aso	ala	d <small>ã</small> busi	ba <small>β</small> a
BAH	pideu	pisambure	balu / holi	para <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a
TIR	pideu	pisambure	balu	para <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a
BUR	pideu	pisambure	balu	para <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a
WAL	pideu	pisambure	balu	aso	ala	d <small>ã</small> βu / d <small>ã</small> busi	ba <small>β</small> a
BOL	pisurumba	pisambure	holi	aso	ala	d <small>ã</small> βu	ba <small>β</small> a
MBL	pisurumba	pisambure	holi	para <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a
BNG	pisurumba	pisambure	holi	para <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a / ato
MAS	pesurumba	pesambure	holi	para <small>?</small> aso	ala	d <small>ã</small> βu	ba <small>β</small> a
WAS	pedeu	pesambu <small>χ</small> e	peholi	pa <small>χ</small> a <small>?</small> aso	pe <small>?</small> ala	davue	ato <small>?</small> e
KAI	medeu	pesambuxe	holi	aso	ala	betu	ato
WKL	pideu	pisambuxe	holi	aso	ala	bicu / d <small>ã</small> βu	ato
WLW	pededeu	pesambuxe	holi	aso ~ paxa <small>?</small> aso	ala	becu	ato
KMB	pidedeū	sambuxe	holi	aso	ala	becu	unta <small>?</small> unta / ato
LLM	pesorumba	peka <small>?</small> isi	balu	paraaso	ala	d <small>ã</small> βu	ba <small>β</small> a

320	321	322	323	324	325
	<i>menjunjung</i>	<i>bernafas</i>	<i>berludah, meludah</i>	<i>muntah</i>	<i>berkentut</i>
	to carry on the head	to breathe	to spit	to vomit	to fart
RNG	su?u	pisina?a	pikacupei	polonai	pikokocu
KOO	su?u	pisina?a	picupe	polonai	pikokocu
LAP	su?u	pisina?a	pikapera	polonai	pikocu
GND	su?u	pisina?a	pikapeva	polonai	pikokocu
KRY	su?u	pisina?a	pikapeva	polonai	pikokocu
GSJ	su?u	pisana?a	pikapeva	polonai	pikokocu
WAB	su?u	pisina?a	pikapera	polonai	pikokocu
LWP	su?u	pisina?a	pikapontori	polonai	pikokocu
WAG	su?u	pisina?a	pikapunto?i	polonai	pikokocu
KND	su?u	pisina?a	pikapeva	po:nai	pikokocu
TAK	su?u	pisina?a	pinto?i	polonai	pikocu
KAS	su?u	pisina?a	pikapuntori / pikapera	polonai	pikokocu
BAT	su?u	pisina?a	pikapera	polonai	pikocu
BAH	su?u	pisina?a	pikacupe	polonai	pikocu
TIR	su?u	pisina?a	pikapera	polonai	pikocu
BUR	su?u	pisina?a	pikapera / pikacupe	polonai	pikocu
WAL	su?u	pisina?a	pikapera	polonai	pikocu
BOL	su?u	pisina?a	pikapera	polonai	pikocu
MBL	su?u	hela sina?a	pikacupe / pikapera	polonai	pikocu
BNG	su?u	sina?a	kacupera	pulunai	pikocu
MAS	su?u	pesina?a	pekapera	po?ue	pekokocu
WAS	su?ue	pesina?a	pekacue	polonai	pekokohocu
KAI	suu	pesinaa	pekatupe	polonai	pebuu
WKL	su?u	pisina?a	pikapera	polonai	pikokocu
WLW	su?u	pesine?e	pehode	po?ue	pekokocu
KMB	su?u	pisine?e	pe?elu	po?u?be	pikokocu
LLM	suu	pesine?e	pe?elu	tolua	kokocu
					peŋkao

	326 <i>menggosok (badan)</i> to rub (massage)	327 <i>bergembung, membengkak</i> to swell (as an abcess)	328 <i>mengalir</i> to flow	329 <i>pergi</i> to go	330 <i>berlari</i> to run
RNG	pagiſe	kaβao	βa?a	inte	lumpa
KOO	jampu / pisi [massage]	βao [cf. noβa'om 'it has swelled']	βa?a	haŋka [cf. ha'ŋkam with completive marker]	lumpa
LAP	puro	tente	βulu / βa?a	haŋka	tode
GND	pigigisi	tente	βa?a	inte	tode
KRY	pigigisi	tente	βa?a	haŋka	tode
GSJ	piptuŋo	tente	va?a	haŋka	tode
WAB	pikurai	tente	βa?a	inte	tode
LWP	pipisi	tente / ɓanŋka	βa?a	inte	tode
WAG	pikoso	tente	βa?a	inte	tode
KND	pigoso	tente	βa?a	inte	tode
TAK	sapulei	tente	βa?a	inte	tode
KAS	piptuŋo	tente	βa?a	haŋka / liŋka	tode
BAT	pigoso	tente	βulu / βa?a	inte	tode
BAH	pisapulei [rub] / pipisi [massage]	tente	βa?a	inte	tode
TIR	piptuŋo	tente / banŋka	βa?a	inte	tode
BUR	piptuŋo	moβao / tente	βa?a	inte	tode
WAL	piptuŋo	tente	βulu	inte	tode
BOL	piptuŋo	tente / beke [swell, of belly]	βa?a / siβulu	inte	tode
MBL	piptuŋo	tente	βa?a	inte	tode
BNG	gigisi	tente	βa?a	inte	kajujulu
MAS	pejampu	tente	βa?a	inte / βila	tode
WAS	pepuŋo	notente	nova?a	novila	tode
KAI	pepsi	tente	siβulu	inte	tende
WKL	sapulei / pigigisi	tente	siβulu	inte / liŋka	tode
WLW	sapulei	tente	la?a / siβulu [flow, also flotsam]	liŋka	kampulei
KMB	pi?icu	bokoboko	βinulu	ompa	tode
LLM	gigisi [rub] / pisi-pisi [massage]	ɓoko	βulu	ompa	bunculi

	331 <i>berjalan</i> to walk	332 <i>berdiri</i> to stand	333 <i>duduk</i> to sit	334 <i>berbaring</i> to lie down	335 <i>menguap</i> to yawn	336 <i>tidur</i> to sleep
RNG	pikake / haŋka	tadē	hoŋa	pindondole	haha?a?e	minoko
KOO	haŋka	tadē	hoŋa	pindondole	kaŋaeβa	minoko
LAP	haŋka	tade	hora	pindondole	piŋaβa	mocuru
GND	haŋka	tadē	hoŋa	pindondole / pindole-ndole	mŋaβa	mcusu
KRY	haŋka	tadē	hoŋa	ndole / pindondole	mŋaβa	mcusu
GSJ	haŋka	tadē	hoŋa	pindondole	piŋava	mcusu
WAB	βilaka	tade	hora	pindole-ndole	moŋaβa	minoko
LWP	haŋka	tade	hora	pindondole	piŋaβa	ncuru
WAG	laŋka	tadē	hoŋa	pindoe-ndole	piŋaβa	ncuňu
KND	liŋkaliŋka	tadē	hoŋa	ndole / pindole-ndole	piŋaβa	mocusu
TAK	pihahaŋka	tadē	hoŋa	ndole	piŋaβa	moncusu
KAS	liŋka	tadē	hora	pindole-ndole	piŋaβa	mocuru
BAT	haŋka	tade	hora	pindondole	piŋaβa	moncuru
BAH	haŋka	tade	hora	ndole	piŋaβa	moncuru
TIR	haŋka	tade	hora	ndole	piŋawa	muncuru
BUR	haŋka	tadē	hora	pindondole	piŋaβa	muncuru
WAL	haŋka	tadē	hora	ndondole	piŋaβa	mocuru
BOL	liŋka	tade	piŋkora	pindondole	piŋaβa	monoko
MBL	liŋka	tade	piŋkora	pindondole	piŋaβa	mo:do
BNG	βila	pintantade	piŋkora	pindondole	piŋaβa	moodo
MAS	βila	tadē	peŋkora	pendondole	peŋaβa	moodo
WAS	pevila-vila	tadē / pentadē-ntadē	pecuko-cuko	ndole-ndole	moŋava	monoko
KAI	liŋka	tadē	poŋkoxa	ndole	moŋaβa	monoko
WKL	haŋka	tadē	hora	ndole-ndole	piŋaβa	mocuxu
WLW	liŋka	tadē	pupunda	pedofole	moŋaβa	monoko
KMB	lampa	tade	pupunda	keŋkele	muŋaβa	mocuxu
LLM	lampa	tadē	popunda	keŋkele ~ peŋkele-ŋkele	momaa	mocuru

	337	338	339	340
	(ber)mimpi	<i>datang, tiba</i>	<i>tinggal</i>	<i>nama</i>
	to dream	to come, arrive	to live, dwell	name
RNG	po?inipi	bundo	bokoli	ŋea
KOO	po?onipi [o in penultimate syllable is confirmed]	bundo [cf. bu'ndom with completive marker]	pihohoŋa	ŋia
LAP	ponipi	bundo	hora	ŋea
GND	poinipi	bundo	taka	ŋea
KRY	poinipi	bundo [come] / xato [arrive]	taka	ŋea
GSJ	poinipi	bundo	taka	ŋea
WAB	poinipi	bundo	hora	ŋea
LWP	poinipi	bundo	hora	ŋea
WAG	poinipi	bundo / ŋato	hoŋa	ŋea
KND	poinipi	bundo	hoŋa	ŋea
TAK	pupunipi	bundo	pihohoŋa	ŋea
KAS	poinipi	bundo	hora	ŋea
BAT	ponipi	bundo	hora	ŋea
BAH	po?inipi	bundo	hora	ŋea
TIR	po?onipi	bundo	hora	ŋea
BUR	pu?inipi	bundo	hora	ŋia
WAL	ponipi	bundo / rato	hora	ŋea
BOL	po?inipi	bundo [come] / rato [arrive]	piŋkora	ŋea
MBL	po?onipi	bundo	piŋkoŋkora	ŋea
BNG	pipu?inipi	bundo	pihohora	ŋea
MAS	po?inipi	bundo [come] / rato [arrive]	peŋkora	ŋea
WAS	po?inipi	no?umba	kotaxu	kona
KAI	poinipi	ambu / xato	mea-meate [mea-meate i kaana 'stay at home', mea-meate i kinamo 'stay in (one's) garden']	kona
WKL	ponipi	bundo / kumbo / rato	punda	ŋea
WLW	ponipi	kumbo	punda [cf. bucu 'stop by']	ŋea
KMB	ponipi	bundo	popunda [cf. bucu 'stop by']	ŋea
LLM	po?inipi	bua	pepunda-punda	ŋea

	341	342	343	344	345
	<i>apa?</i>	<i>siapa?</i>	<i>di mana?</i>	<i>kapan?</i>	<i>bagaimana?</i>
	what?	who?	where?	when?	how?
RNG	hecike?e	he?eno	impa?e	naipia	maimpa?e
KOO	pa?a?ea	he?eno	impa?ea	naipia	mpampa?ea
LAP	para?eno	nde?eno	ka?umpa?e	na?ipia	mpa?umpa?e
GND	para?e	inde?eno	impa?e	naipia	maiimpa?e
KRY	para?e	inde?e	impa?e	naipia	maiimpa?e
GSJ	para?e	nde?ea	impa?e	naipia	maiimpa?e
WAB	para?e	ye?eno	impa?e	naipia	maiimpa?e
LWP	parae	nde?eno	impae	naipia	mbo?impae
WAG	pa?ae	oie?e	impae	naipia	mba?impae
KND	parae	ie?e	impae	nipiamo [past] / naipia [future]	mba?impae
TAK	parae	eeno	impae	naipia	mbampae
KAS	parae	inde?e	impae	nipiamo [past] / naipia [future]	ma?impa?e
BAT	para?a	inde?e	kaimpa?a	naipia	mbaimpa?e
BAH	para?a	inde?eno	kaimpa?a	naipia [cf. naipiamo asking about the past]	mba?impa?a
TIR	para?e	nde?eno	kaimpa?e	naipia	maiimpa?e
BUR	para?e	nde?eno	kaempa?e ~ kaempa?a	naipia	maiimpa?eno
WAL	para?e	nde?eno	i?ampa?e	naipia	maiimpa?e
BOL	para?e	inde?e	impa?e	naipia	mboimpa?e
MBL	haeno	ye?eno	impa?e	ipiamo / naipia	mbahae
BNG	haeno	ye?eno	impa?e	naipia	mbahae
MAS	hae / haeno	ie?eno	?aimpa?e	naipia	mbohae
WAS	ohae	he?eno	vehae	naipia	mbahae [vowels are nasalized]
KAI	paxae	iyeno ~ i:eno	impae	nipiamo [past] / naipia [future]	to:mpae
WKL	paxa?e ~ paxae ~ a?e	inde?eno	impa?e	naipia [cf. naipiamo kumbo? 'when did (you) arrive?']	mompa?e
WLW	paxa?e ~ paxae	ie?eno	ipa?e	naipia	mompae
KMB	paxa?e	ye?eno	dipa?e	naipia	mompaxa?e
LLM	para?e	i?e?eno	ipa?e	pa?apa ~ apa?apa	mbepara?e

	346 <i>mengapa?, kenapa?</i> why?	347 <i>kamar</i> room	348 <i>roti</i> bread	349 <i>radio</i> radio
RNG	mo?apa	kamara	roti	radio
KOO	mo?apa	kamara	roti	radio
LAP	mo?apa	—	—	—
GND	mo?apa	kamaña	roti	radio
KRY	mo?apa	kado?o	roti	radio
GSJ	mo?apa	kamara	roti	radio
WAB	mo?apa	kamara	roti	radio
LWP	mo?apa	kamara / kado?o	roti	radio
WAG	moapa	kamara	roti	radio
KND	moapa	kamara	roti	radio
TAK	moapa	kamara / kakadoro	roti	radio
KAS	mo?apa	kado?o / kamara	roti	radio
BAT	mo?apa	kamara	kui	radio
BAH	mo?apa	kamara	roti	radio
TIR	mo?apa	kamara	roti	radio
BUR	mo?apa	kamara / kado?o	roti	radio
WAL	mo?apa	—	—	—
BOL	mo?apa	konokoa	roti	radio
MBL	mo?apa	ko:doa [bedroom]	roti	radio
BNG	mo?apa	kamara / ko:doa [bedroom]	roti	radio
MAS	mo?apa	—	—	—
WAS	mo?apa	kamara	—	—
KAI	moapa	—	—	—
WKL	moapa	—	—	—
WLW	moapa	kado?o	roti	radio
KMB	mo?apa?ia	—	—	—
LLM	mo?apa / pe?apa	—	—	—