

# Culinary Eco-lexicon of Panai Malay Community

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Abstract: This paper describes culinary eco-lexicons as a representation of the environmental wealth of the Panai Malay community towards its culinary culture through its lexicons. The theory is the ecolinguistics. Ecolinguistic theory focuses on a number of environmental concepts in the form of language, namely the form of lexicon. In analyzing the data used referential method. From the analysis, it can be concluded that culinary eco-lexicons in Panai Malay Society in addition to reflecting the natural wealth and environment also reflects the culinary culture of the people. For example, the difference between culinary *labar* and *anyang* which by other Malay society is a kind of culinary name. The different naming also indicates its derivative lexicon. This lexicon refers to the nouns and verbs. The nouns encompasses the category of the biotic environment, whereas the verbs categorize surrounding the category of abiotic environments. Raw fish processing without fire is known as *anyang ikan tarubuk pane*, the peculiarity of this name refers to the lexicon and the phrase it derives. Culinary eco-lexicon *gule lomak* and *gule masam* implicitly indicate the existence of culinary similarities with other Malay. Similarly, the *sarak torong* is similar to culinary Malay Asahan. However, any lexicon that can be derived from the above culinary diversity still reflects the local cultural wisdom implicitly.

## 1 INTRODUCTION

Culinary which is one of the ancestral cultural heritage becomes a very important part in the preservation of culture. Each region has a policy that distinguishes one area from another. Culture is present because of the process of learning from the interaction process in the community both verbally and nonverbally. The difference is part of the uniqueness that became the identity of the cultural heritage of the community. It is also a necessity that the Malay people also have a wealth of culinary as a cultural heritage of their ancestors. The Malay community, which is distinguished by its geographical position, such as Melayu Panai, has own distinctive characteristics in culinary naming, even though the referent is similar or almost identical.

The culinary eco-lexicons of Malay Panai community treasures as ancestral cultural heritage needs to be immediately documented because the increasingly of fast food in Indonesia are also found in the villages. This condition encourages the consumptive culture of fast food especially in the

younger generation. Consumptive cultural patterns of fast food culinary have had an impact on the erosion of some vocabulary from the cognitive of old speakers because there is no longer any medium to transmit any lexicon of cultural heritage to the younger generation, such as the scarcity of spice plants for certain culinary types as lexicon referents. As a result, many young people do not know the lexicon associated with culinary. The general public is more familiar with the Indonesian language or foreign language than the local language. In fact, culinary with local naming is essentially the cultural expression of its people (cf. Nuraisyah, Mohd Salehuddin Mohd Zahari, Mohd Zain Mohd Kutut, Mohd Shaazali Mohd Sharif, 2013). Lauder mentions that the destruction of natural elements or cultural elements will have an impact on the disappearance of the speaker's conception of the entity because the extinction of a regional language implies the loss of all cultural values stored in that language, including environmental wisdom (Lauder, 2004). That is, each lexicon reflects the cultural wisdom of the region implicitly.

It cannot be denied that the condition of local language so far more marginalized, especially on the

younger generation/adolescent. Ages that are particularly vulnerable to outside influences and age in the search process cause them to prefer different changes to their culture, one of it is language. They no longer have local language skills. They almost no longer understand the cultural vocabulary, even the everyday vocabulary. UNESCO (2003) predicts that approximately 90% of the existing languages may be replaced by more dominant languages.

The culinary eco-lexicons are part of the local language vocabulary that is full of cultural wisdom. They lived centuries ago and still exist today, and have a reciprocal relationship between language and their environment, both on a macrocosmic scale and on a microcosmic scale (Mbetse, 2013). Inside them, there is a material culture product that originates in the natural environment. In the eco-lexicons are stored wealth of meaning and value of human life. However, as time goes by and the socioecological spatial dynamics that become the living spaces of those languages, the terms are shifted, altered, or marginalized by terms outside the Panai Malay language which are increasingly accepted by its speakers. It is related as expressed by Lindo and Bundsgaard (Lindo and Bundsgaard (eds.) 2000) that the environment changes, the language that lives in society changes over time. The most rapidly changing languages are lexicons. This changing is influenced by three dimensions of ideological, sociological, and biological dimension (Mbetse, 2009 and Widayati, Gustiningsih, and Lubis, 2017)

The changes in language that related to environmental conditions, both natural environment and cultural social environment studied through ecolinguistic studies. The vocabulary of the environment or eco-lexicon is a recording of a number of nuances of culture and natural wealth of its environment, i.e human, cultural, and society. The study of culinary eco-lexicons as part of the Malay language environment vocabulary tried to uncover the spiritual and physical riches of the community (Fill and Muhlhauser (Eds), 2001). Through the excavation of this culinary eco-lexicons treasury, documentation of culinary eco-lexicons of Panai Malay community can be realized.

## 2 METHOD

This research uses ecolinguistic concept. Ecolinguistics examines the interrelationships between language and its environment, both human/social environments and the natural environment. It means that ecolinguistic examines

the existence/absence, how, and why with the language spoken by the community that related to the environment. Haugen (Fill and Muhlhauser (Eds), 2001) says that language ecology can be defined as the study of interactions between a particular language and its environment. The definition of environment firstly directs one's mind to a referential world whose language provides the index. The real language environment is the community that uses it as one of its codes. Language exists only in the minds of its users, and serves only in connecting these users to one another and with nature, that is their social and environmental. Part of the ecology is psychological: its interaction with other languages in the minds of bilingual and multilingual speakers. The other part of the ecology is sociological: its interaction with society that serves as a medium of communication. The language ecology is determined primarily by those who study it, use it, and send it to others.

The linguistic data about the culinary lexicons of Panai Malay is collected from informants through interview. The collected data are then grouped and classified under the names of culinary, ingredients, spice plants, flavors, and activities. To describe this culinary eco-lexicons is used referential method with the equalizing and differentiating techniques (Sudaryanto, 2016). That is, the linguistic data should refer to the observed environmental identity as an understanding of the meaning and reference figure. In addition to using the ecolinguistic approach in exploring and describing culinary lexicon in the cognitive speakers, it is also described through the interrelation and interdependence of community in the area with their natural environment and place where they live (Mbetse, 2013). The existence of interrelation, their interdependence to their environment, keeps the lexicon alive in its speechcommunity. A number of these culinary lexicons are associated with the available spice plants, ingredients, and flavors so that the culinary lexicons of the Panai Malay can be documented.

## 3 RESULTS AND DISCUSSIONS

Humans as language users and environment as the living spaces of language affect each other. Based on the ecological parameters of language diversity within the dimensions of the space (environment) can be in line with the diversity of the lingual wealth of its community (Fill and Muhlhauser (Eds). 2001); (Odum, 1996); (Mbetse, 2009). This can happen if

there is a strong interaction and interrelation between the community and the existing environment. Pattern of interaction and interrelation of the community can be any activity utilization of elements that are in the environment, both biotical (biotic) and abiotical (abiotic). Furthermore, the concept of interrelationship between sustainable and continuous will form a pattern of interdependence between humans and the environment that provides a vessel for humans to survive and thrive.

Accordingly, the diversity of the culinary lexicons of a language is a manifestation of society's understanding of its environment. The more lexicons that contain information about the environment of a language, indicating the greater wealth of the environment within the language community (see Santoso, 2017). This can be understood, if people within a particular environment collectively often see, touch, and even use certain animal or plants, but do not have a lingual code to mention the entity in question, this is not possible. Such circumstances will lead to the phrase "Very familiar, but unfamiliar" (*Sangat akrab, tetapi tidak mengenal*) (see also Widayati, 2018)

The diversity and culinary characteristics in an area is influenced how the physical environment

characteristics in the area. In addition, a harmonious relationship between humans and nature also becomes a determinant of how culinary types are familiar to the people. As Haugen (Fill, and Muhlhauser (Eds), 2001) said that the real language environment is a society that uses it as one of its codes. The existence of culinary lexicon that is close enough to the life of the community will be intertwined interactions and interrelations that create dependence between society and nature. The understanding gained from these interactions and interrelations is coded into lingual.

As a manifestation of the wealth of its environment, it is appropriate that the surrounding community understand a number of lexicons related to its culinary, whether it's the lexicon of culinary name, the lexicon of the plant name as the main ingredient of the culinary, as well as the verb lexicon that refers to the culinary making activity. The familiarity of the Malay Panai community with the environment manifests itself in lingual units that understood jointly by its speakers. The following is described a number of culinary eco-lexicon culinary Malay Panai Society.

Table 1. Culinary Eco-lexicon of Panai Malay

No	Lexicons	environmental categories		Word Class Category		Meaning/ Science name
		Biotic	Abiotic	Nom	Verb	
1.	labar	-	+	+	-	anyang
2.	anyang	-	+	+	-	anyang
3.	gule	-	+	+	-	curry
4.	Gule masam	-	+	+	-	sour curry
5.	saraktorong	-	+	+	-	eggplant curry
6.	daun buas-buas	+	-	+	-	daun buas-buas ( <i>prema foetida</i> )
7.	daun pakis	+	-	+	-	daun pakis ( <i>diplozium esculentum</i> )
8.	ikan tarubuk pane	+	-	+	-	terubuk fish ( <i>tenualosa toli</i> )
9.	ikan baong	+	-	+	-	baung fish ( <i>mystus</i> )
10.	ikan pocah pariok	+	-	+	-	pecah periuk fish
11.	ikan sinangin	+	-	+	-	senangin fish ( <i>eleutheronema tetradactylum</i> )
12.	ikan gamak	+	-	+	-	gamak fish
13.	ayam	+	-	+	-	chicken ( <i>gallus gallus domesticus</i> )
14.	torong	+	-	+	-	eggplant ( <i>solanun melongena l</i> )
15.	toge	+	-	+	-	bean sprouts ( <i>phaseolus aureus</i> )
16.	jantung pisang	+	-	+	-	heart of banana
17.	kalapo	+	-	+	-	coconut ( <i>cocos nucifera</i> )
18.	katumbar	+	-	+	-	coriander ( <i>coriandrum sativum</i> )
19.	cabe merah	+	-	+	-	red chili pepper ( <i>capsicum annum l</i> )
20.	cabe kocik	+	-	+	-	Cayenne pepper ( <i>capsicum annum</i> )
21.	bawang merah	+	-	+	-	union ( <i>allium cepa var. aggregatum</i> )
22.	asam limo	+	-	+	-	lemon ( <i>citrus x aurantiifolia</i> )
23.	sore	+	-	+	-	lemongrass ( <i>cymbopogon citratus</i> )

No	Lexicons	environmental categories		Word Class Category		Meaning/ Science name
		Biotic	Abiotic	Nom	Verb	
24.	kolat	+	-	+	-	flower nipah ( <i>nypa fruticans wurmb</i> )
25.	lado/marica	+	-	+	-	pepper ( <i>piper nigrum</i> )
26.	daun kunyit	+	-	+	-	turmeric leaves ( <i>curcuma longa</i> )
27.	daun joruk purut	+	-	+	-	lime leaves ( <i>citrus hystrix</i> )
28.	halio	+	-	+	-	ginger ( <i>zingiber officinale</i> )
29.	kunyit	+	-	+	-	turmeric ( <i>curcuma longa</i> )
30.	langkuas	+	-	+	-	galangal ( <i>alpinia galanga</i> )
31.	robung	+	-	+	-	bamboo shoots ( <i>dactylokladusstenostachys</i> )
32.	daun salam	+	-	+	-	Bay leaf ( <i>syzygium polyanthum</i> )
33.	udang koring	+	-	+	-	dry shrimp ( <i>palaemonidae</i> )
34.	udang	+	-	+	-	shrimp ( <i>palaemonidae</i> )
35.	udang kacopeh	+	-	+	-	shrimp kecepe ( <i>acetes</i> )
36.	asam potong	+	-	+	-	acid gelugur ( <i>garcinia atroviridis</i> )
37.	gulo aren	-	+	+	-	Brown sugar
38.	pati santan	-	+	+	-	Coconut milk
39.	dipasiang	-	+	-	+	weeded
40.	diputek/potik,	-	+	-	+	plucked
41.	dirobus,	-	+	-	+	boiled
42.	dikukur,	-	+	-	+	grated
43.	digongseng	-	+	-	+	rizzled
44.	digiling lumat	-	+	-	+	finely grinded
45.	dirajang (halus)	-	+	-	+	finely sliced
46.	diporas	-	+	-	+	squeezed
47.	dicolur	-	+	-	+	taken with fork
48.	dikupek	-	+	-	+	peeled
49.	dirondam	-	+	-	+	soaked
50.	digoreng	-	+	-	+	fried
51.	dipanggang	-	+	-	+	baked
52.	dikikis	-	+	-	+	scraped
53.	ditumis	-	+	-	+	sauteed
54.	digaul	-	+	-	+	stirred
55.	ditotak	-	+	-	+	cut big
56.	dibolah	-	+	-	+	split
57.	disaring	-	+	-	+	filtered

A number of culinary names, materials, flavour, and manufacturing activities that lexically coded mark the existence of environmental diversity as well as marking the conditions of the Panai region. The results of the interaction, interrelation, and interdependence of society with their environment are manifested in the various lexicons above. As the legacy of his ancestors, the knowledge that tarnished in the cognitive speakers made the community very familiar with the lexicon and its referents.

### 3.1 Culinary “labar”

The culinary *labar* known as *anyang* on the community of East Coast Malay North Sumatra. *Anyang* terminology refers to the type of food with fried coconut, both with the basic ingredients of

leaves (*dedaunan*), as well as various marine biota, so that coastal communities know the phrase of *anyang pakis*, *anyang kepah*, *anyang ayam*. However, in the Panai Malay community, *anyang* lexicon is known to be two variants, namely *labar* and *anyang*. *Labar* refers to *anyang* type whose basic ingredients are derived from leaves, whereas *anyang* refers to *anyang* type whose basic ingredients come from chickens, and fish species.

From a sociological perspective, culinary *labar* is an identity as a typical Panai Malay food. Knowledge-based society with a variety of plants that exist in the vicinity, people understand the two forms as various types of labars, namely:

*Labar pakis* ‘anyang pakis’

*Labar buas-buas* ‘anyang buas-buas’

The Panai Malay society only recognizes two types of *labar* as a distinctive culinary, although there are many other types of *labar* that can be formulated, such as *labar toge*, *labar umbut pisang*. However, this type of *labar* is a culinary adoption of other ethnic Malays, such as Malay Asahan. This type of *labar* adoption is not so familiar by the Malay Panai community.

The naming of the *labar pakis* and *labar buas-buas* refers to the main ingredients of the culinary, such as, *daun buas-buas* (*Prema Cordiflora Syzygium Aqueum*), *daun pakis* (*Diplazium esculentum*). Usually *labar pakis* is processed together with *toge*. The culinary lexicon is supported by a set of lexicons in the form of a lexicon of noun categories such as, ingredients, spices, flavorings, and categorization of verbs, that is processing. Some similar culinary are generally supported by similarly spice lexicons. The noun lexicon device as a meronimi lexicon of *anyang* is *kalapo*, *katumbar*, *udang koRing*, *cabe/cabai meRah*, *halio*, *bawang meRah*, *asam limo* and *udang tangguk*.

The existence of interrelation and interaction of Malay society with various types of spice plants is derived from certain verbs to realize culinary *labar*, so it can be consumed, that is the verb *dipotik* 'to take the leaves from the tree and to cut the leaves by hand'. Cutting leaves by hand will give different properties than they use a knife as a tool. Fresh green colour will survive even though the leaves are either *dicolur* 'sprinkled' or *robus* 'boiled'. Other verbs are *dikukur*, *digongseng*, and *digiling* as a noun *kalapo* representation. The verb phrase *digiling halus* is derived from the noun *cabe merah*, *katumbar*, *marica*, and *udang koring*. While verb phrase *dirajang halus* are derived from the noun *cabe meRah*, *halio*, dan *bawang merah*.. The last verb is *dibolah* and *diporas* are derived from the noun phrase *asam limau* (see Widayati, 2018).

### 3.2 Culinary "anyang"

Culinary *anyang* is familiarized by the Panai Malay community as a type of food using coconut fry, given the essence of coconut milk, and based on chicken or *terubuk* fish (*tenualosa toli*). From *anyang* culinary lexicon found two forms of phrase:

*Anyang tarubuk pane* 'terubuk fish's anyang'  
*Anyang ayam* 'chicken anyang'

Culinary *anyang tarubuk pane* is familiarized by the Panai Malay community as food that is processed without fire. That is, *ikan tarubuk* is

processed into *anyang* without cooking. *Ikan tarubuk* is cleaned and and given asam limo juice until it lost its fishy. Verbs *dipasiang* and *diporasi* are known in processing *anyang tarubuk pane*. The existence of interaction of Panai Malay community with kind of plant of *kalapo*, *katumbar*, *sore*, *cabe merah*, *cabe kocik*, *bawang merah*, *asam limo* make this type of culinary as typical food of Panai Malay society which is not owned by Malay Coastal community of East Sumatra. From the noun *kalapo* found meronimi phrase *kalapo gongseng* and *pati santan*. In this culinary is not known verb *dicolur* or *dirobus*. Precisely known ones are *dikikis*, *digiling*, *di rajang*, *diporasi asam limo* and adjectives *mantah 'raw'*.

Culinary *anyang ayam* is another type that is also a characteristic of the Panai Malay community. Both types of this *anyang*, are found in Panai Labuhan Bilik. Typical processing methods make these two types of culinary *anyang* as part of the culture of the community that needs to be preserved. The culinary of *anyang ayam* oversees a set of lexicons of nouns and verbs. Noun lexicon, such as *ayam*, *kalapo*, *pati santan*, *katumbar*, *sore*, *cabe merah*, *cabe kocik*, *bawang merah*, *jantung pisang*, dan *kalapo goreng* is a meronimi of the phrase *anyang ayam*. In the phrase *anyang ayam* is also found meronimi categorized verbs, namely *dipanggang*, *ditotak*, *dikupek*, *digongseng*, *digiling lumat*, *dirajang*, *dikukur*, *diporas*, *dirobus*, dan *disaring*. The verb lexicon of each refers to a different noun. The verbs of *dipanggang*, *ditotak*, and *dikupek* refer to noun of *ayam*; verbs of *dikukur*, *diporas*, *disaring*, and *digongseng* refer to thenoun of *kalapo*; the verb phrase of *digiling lumat* refers to the nouns of *katumbar*, *cabe merah*, *cabe kocik*, and *bawang merah*. The verb of *dirajang* refers to the biotic nouns of environmental categories, ie *sore*, *cabe merah*, *bawang merah*, and also *jantung pisang*. From the noun phrase banana *jantung pisang yang dirajang* derived verb *dirobus*.

What is interesting from both types of this *anyang* Panai Malay is the noun phrase *pati santan* as a typical culinary. In the East Coast of Sumatra Malay society, *pati santan* as one of the spices of *anyang* is not recommended. Precisely in the Panai Malay community, *pati santan* must exist and become a distinctive culinary culture that is different from other Malay culinary culture.

### 3.3 Culinary "gule"

The natural and environmental conditions of the Panai Malay community consists of sea, harbor/port,

rivers, and headlands make people very familiar with the marine environment. The main livelihood of the community is fishermen. Therefore, do not be surprised if the population is very familiar with the culinary-based fish. Even in Panai there is a name of fish that is only known in the area, namely *ikan gamak* (a kind of fish). So typical of these fish for the Panai community, especially the Negeri Lama Kecamatan Bilah Hilir, so that emerged the expression for the name of the area “*Negeri Lama si Kota Gamak*”.

In addition to *anyang*, the Panai Melayu community also knows *gule*. Familiarity of the community with its environment also affects the various lexicons of *gule*, among others, the emergence of the phrase:

*Gule masam ikan sembilang* ‘curry sour fish of sembilang’

*Gule masam ikan baong* ‘curry sour fish of baung’

*Gule lomak pocah pariuk* ‘curry fish of pocah pariuk’

*Gule lomak sinangin* ‘curry fish of senangin’

Culinary *gule lomak* and *gule masam* mixed with a variety of different spices make this culinary special food for Malay people. On the phrase *gule masam* known noun phrase *asam potong*, whereas in the phrase *gule lomak* known phrase *santan kalapo*. Another categorical noun lexicon that can be derived from this culinary of *gule masam* is *cabe merah, bawang merah, bawang putih, kunyit, halio, sore, daun joruk, robung, and asam balimbing*. While the verb lexicon is *dipasiang, digiling halus, dipotuk*. Somewhat different with *gule masam*, *gule lomak* besides recognizing the type of lexicons of spice, also recognize noun of *katumbar*, noun phrase *santan kalapo*, and lexicon of verbs *are dikukur, diporas dan disaring*.

The name of marine biota *ikan pocah pariuk* only known in the Panai region. This lexicon has not found its equivalent in other Malay and its scientific name. Therefore, so far the authors conclude that this type of culinary is a typical culinary of Panai Malay community, although compounding and spice processing is almost the same as other Malay society.

### 3.4 Culinary “Sarak Torong”

The existence of culinary *sarak torong* in Panai communities shows that although that although it has its own peculiarities in culinary, the sense of belonging to Malay culture grows in the Panai

Malay community. Culinary *sarak torong* is also known in the Asahan Malay community with the name *sarak torung*. The basic ingredients and processing methods are the same. From the phrase *sarak torong* is derived a number of biotic lexicons and verbs lexicon, namely *cabe merah, bawang merah, bawang putih, balacan, tomat, udang kacopeh, daun kunyit, daun salam, katumbar, santan, dibolah, ditumis, dikupas, dan dilobangi*.

This perception of culinary similarity also shows the interrelation and interaction of Malay society with its environment. That is, the realization of various lexicons as a representation of the natural environment is a manifestation of society to its environment through language. The more lexicons that contain information about the environment of a language, indicating the wealth of the environment is great.

## 4 CONCLUSION

The culinary eco-lexicons in Panai Malay Society in addition to reflecting the natural wealth and environment also reflects the culinary culture of the people. For example, the difference between culinary *labar* and *anyang* which by other Malay society is a kind of culinary name. The different naming also indicates its derivative lexicon. This lexicon refers to the nouns and verbs. The nouns encompasses the category of the biotic environment, whereas the verbs categorize surrounding the category of abiotic environments. Raw fish processing without fire is known as *anyang ikan tarubuk pane*, the peculiarity of this name refers to the lexicon and the phrase it derives. Culinary eco-lexicon *gule lomak* and *gule masam* implicitly indicate the existence of culinary similarities with other Malay. Similarly, the *sarak torong* is similar to culinary Malay Asahan. However, any lexicon that can be derived from the above culinary diversity still reflects the local cultural wisdom implicitly.

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## REFERENCES

- Fill, Alwin and peter Muhlhauser (Eds), 2001. *The Ecolinguistics Reader: Language, Ecology, and Environment*. Continuum. London and New York.
- Mbete, Aron Meko, 2009. "Selayang Pandang tentang Ekolinguistik: Perspektif kelinguistikan yang Prospektif" Bahan untuk Berbagi Pengalaman Kelinguistikan dalam Matrikulasi Program Magister Linguistik Pascasarjana Universitas Udayana, 12 Agustus 2009.
- Mbete, Aron Meko, 2013. Penuntun Singkat Penulisan Proposal Penelitian Ekolinguistik. Vidia. Denpasar.
- Lauder, M.R.T.M. 2004. *Simposium Internasional Kajian Bahasa, Sastra dan Budaya*. Austronesia III, Denpasar.
- Lindo, Anna Vibeke and Jeppe Bundsgaard (eds.), 2000. "Dialectal Ecolinguistics Three Essays". *Symposium 30 Years of Language and Ecology, Graz 2000*. University of Odense research Group for Ecology, Language and Ecology. Austria.
- Nuraisyah Md. Yusoff, Mohd Salehuddin Mohd Zahari, Mohd Zain Mohd Kutut, Mohd Shaazali Mohd Sharif, 2013. "Is Malaysian Food Important to Local Tour Operators?" In *AicE-Bs2013 London Asia Pacific International Conference on Environment-Behaviour Studies* University of Westminster, London, UK, 4-6 September 2013. "From Research to Practice". *Procedia - Social and Behavioral Sciences* 105 (2013) 458 – 465. Available online at [www.sciencedirect.com](http://www.sciencedirect.com)
- Odum, Eugene P, 1996. *Dasar-Dasar Ekologi*. Edisi ketiga. Terj, Tjahyono Samingan. Gadjahmada University Press. Yogyakarta.
- Santoso, Wahyudi Joko, 2017. "Analisis Sosio-Ekono-Ekolinguistik terhadap Pemertahanan Leksikon Tanaman Tradisional untuk Bumbu Masak bagi Mahasiswi di Kota Semarang". In *Jurnal Pendidikan Bahasa dan Sastra Indonesia Volume 2 Nomor 2 September 2017*. Page 69-76 p-ISSN: 2477-5932 e-ISSN: 2477-846X.
- Sudaryanto, 2016. *Metode dan Aneka Teknik Analisis Bahasa: Pengantar Penelitian Wahana Kebudayaan secara Linguistik*. Sanata Dharma University Press. Yogyakarta.
- Widayati, Dwi, Gustiningsih, Rosliana Lubis. 2017. "Shift and Reduction in the Eco-Lexicon Treasures of Asahan Malay" in *International Journal of Humanities Social Sciences and Education (IJHSSE) 2017 Volume 4, Issue 11, November 2017*,
- Widayati, Dwi, 2018. "The repertory of lingual-cultural kitchen herb lexicon representing the Asahan Malay's culinary riches" In *International Journal of Multidisciplinary Research and Development*. 5 (6) 50-53. [www.allsubjectjournal.com](http://www.allsubjectjournal.com)