INNSPUB

Journal of Biodiversity and Environmental Sciences (JBES)
ISSN: 2220-6663 (Print) 2222-3045 (Online)
Vol. 12, No. 3, p. 264-272, 2018
http://www.innspub.net

RESEARCH PAPER OPEN ACCESS

Knowledge, perception and attitude of visitors on the existence of Banua Botanical Garden of South Kalimantan Province

Devvi Rachmatika[1*], Syarifuddin Kadir[2], Hafizianor[2], Badaruddin[2], Taufik Hidayat[3]

[1]*Student of Master Program of Management of Natural Resources and Environment, Post graduate Program, University of Lambung Mangkurat, South Kalimantan, Indonesia*

[2]*Faculty of Forestry, University of Lambung Mangkurat, South Kalimantan, Indonesia*

[3]*Department of Agriculture, University of Lambung Mangkurat, South Kalimantan, Indonesia*

Article published on March 30, 2018

Key words: Knowledge, Perception, Attitude, Banua botanical garden.

Abstract

This study aimed to know the knowledge, perception and attitude, analyze the relationship between knowledge and perception, analyze the relationship between knowledge and attitude, analyze the relationship between perception and visitor's attitude toward Banua Botanical Garden in South Kalimantan. This study used a quantitative social approach. Data collection methods used in this study was questionnaires, field observations and observations. There were 4 (four) ways in collecting data on this study, they were questionnaire method, observation, interview, and literature study. Data analysis used quantitative approach which obtained from the questionnaire. Result of study indicated that the knowledge of visitor which was classified as "know" with percentage value of 69%. Visitor's perception was quite good with a percentage of 80%. The visitor's attitude was classified as neutral, with percentage value of 67%. The relationship of knowledge and visitor's perception of Banua Botanical Garden was strongly correlated. The relationship of knowledge with visitor's attitude towards Banua Botanical Garden was correlated weakly. The relationship of perception to the visitor's attitude toward Banua Botanical Garden was very weakly correlated.

***Corresponding Author:** Devvi Rachmatika ✉ devvirachmatika@gmail.com

Introduction

Biodiversity is one of the main pillars of national development and strategic capital in enhancing the independence and competitiveness of the nation. Biodiversity has six important values, namely: (1) the value of existence related to intrinsic, aesthetic and psychological benefit; (2) the value of environmental services viewed as a single entity, where there is interdependence of one component with another; (3) the value of inheritance relates to the desire to preserve biodiversity in order to be utilized by future generations; (4) the value of choice relates to the potential for future benefits because extinction is considered a loss to human welfare; (5) Consumptive value is a direct benefit that can be obtained as food, clothing or house; (6) productive value is the market value of trade where 40% of the world's economy relies on biodiversity products and processes (Prabowo, 2003 in Witono *et al*., 2012).

High biodiversity is a natural wealth that can provide multipurpose benefits, and has vital and strategic benefits, as the basic capital of national development, and is the lungs of the world that are absolutely necessary, both in the present and future. The high biodiversity and endemism levels have placed Indonesia as a unique natural laboratory for tropical plants with various phenomenas (BAPPENAS, 2003). Exploitation of biodiversity, illegal logging, conversion of forest areas into other areas, poaching and illegal trade are factors that cause biodiversity threat (Kusmana & Hikmat). The existence of Banua Botanical Garden of South Kalimantan Province in Banjarbaru City is located within the government office area of South Kalimantan Province. The width of Botanical Garden Area Banua is 100 hectares. Of the total area of 100 hectares, currently it is only about 30 percent which have been planted with various plants in accordance with the ploting area. For tree plants (rare), the average age of their planting is only about 3 years, so the trees still cannot provide shade and protection from the hot weather.

There are several plant zones in the botanical garden. Three of them are the dicotile fruit zone, the essential zone and the medicinal plant zone. Future development, based on the masterplan that has been created "Banua Botanical Garden" will also be equipped with a maze garden area of 8000 square meters, tower of view, gazebo, and some other supporting facilities such as representative parking yard, guardhouse, nursery office, bench, and garden table and toilet.

In relation to visitor's knowledge, perception and attitude towards Banua Botanical Garden, it is necessary to make a special approach to visitor to know the visitor's view toward Banua Botanical Garden which has attraction other than as green open space, also in the purpose of plant conservation and tourism center. There are three functions of the botanical garden desired by the Government of South Kalimantan Province that is the means of education, recreation, and education. Thus we can know some things that are closely related to the existence of Banua Botanical Garden in the eyes of visitors.

This study aimed to determine the knowledge, perception and attitude of visitors to the existence of Banua Botanical Garden, analyze the relationship between knowledge and perception, knowledge and attitude as well as perception and visitor's attitude toward Banua Botanical Garden.

Materials and methods

Materials

Equipment used during the study included questionnaires, cameras for documentation, stationeries, and computers.

Methods

The data collected in this study consisted of 2 kinds of primary data and secondary data. The gathering of primary data included data of knowledge, perception and attitude conducted by using data of questionnaire and interview with respondents, to complement the 4 (four) methods it was also used observation method. The selected response was as previously described the respondents of Banua Botanical Garden visitors. Secondary data included general condition of study location such as geography, socio-economic condition

and environmental condition obtained from data collection from related institution and literature study from literature related to this study.

Data analysis used quantitative approach obtained from the questionnaire. In the questionnaire there were questions that would be asked to the respondents about knowledge, perception and attitude. In each question it would be obtained a number of alternative answers. Alternative answers referred to the Likert scale using 5 (five) scales of 1, 2, 3, 4 and 5. The Likert scale is the scale used to measure the attitude, opinion and perception of a person or group of people about social events or phenomena. Likert scale is the scale used to measure attitudes, opinions and perceptions of a person or group of people about social events or symptoms. Alternative answers can be seen in Table 1.

Table 1. Alternative Answer and Score.

Alternative Answer			Score
Knowledge	Perception	Attitude	
Strongly do not know	Very bad	Strongly disagree	1
Do not know	Good	Disagree	2
Doubt	No opinion	Neutral	3
Know	Good	Agree	4
Strongly know	Very good	Strongly agree	5

The data collected were first treated through procedures, data editing, questionnaire checking, checking the conformity of the answers with each other then tabulating the data and moving them in the provided work table and then they were analyzed. The analysis to observe visitor's knowledge, perception and attitude about Banua Botanical Garden was conducted by mathematical approach using the following formula, Levis (2013):

$$\overline{Xi} = \frac{\square_1^n 1\,2\,3\,4\,5}{n}$$

Where:

$\overline{Xi}$: Average score for respondents

$\square_1^n$: Amount of 1-n

1, 2, 3, 4, 5 : Likert Scale

n : Number of Questions

To find out which category of knowledge (Pt), Perception (Ps) and Attitude (S) a respondent resided, it could be calculated by the Levis modification formula (Levis, 2013):

$$\text{Pt} = \frac{\bar{X}Pt}{5} \text{ x } 100\%$$

$$\text{Ps} = \frac{\bar{X}Ps}{5} \text{ x } 100\%$$

$$\text{S} = \frac{\bar{X}S}{5} \text{ x } 100\%$$

Table 2. Assessment Category of Knowledge, Perception and Community's Attitudes.

Alternative Answer			Percentage of
Knowledge	Perception	Attitude	Maximum Score Achievement
Strongly do not know	Very bad	Strongly disagree	≥20-36 %
Do not know	Good	Disagree	>36-52 %
Doubt	No opinion	Neutral	>52–68 %
Know	Good	Agree	>68–84 %
Strongly know	Very good	Strongly agree	>84–100 %

Source: Category Assessment Boundary of Levis Modifications Formula Type 2013

Analysis of the relationship of knowledge with perception, analyzed the relationship of knowledge with attitude and analyze the relation between perception and visitor's attitude toward Banua Botanical Garden, data analyze factors influencing knowledge, perception and attitude to get answer from relation between perception and visitor's attitude to Banua Botanical Garden, then the type of analysis which was appropriate to the type and distribution of data was Spearman Rank Correlation. Spearman Rank correlation was used to find a relationship or to test the associative hypothesis significance when each of the associated variables was ordinal, and the data source between variables should not be the same.

Ordinal data was data in the form of rank (Sugiyono, 2013). The formula used to calculate rank correlation analysis is as follows:

$$\rho = 1 - \frac{6 \sum b_i^2}{n\,(n^2 - 1)}$$

Where:

ρ/r: Spearman Rank Correlation Coefficient

b_i : Rank differences between data pairs

$\sum$: Total Amount

n : Total Respondents

Rho value is used to test the correlation significance with Rank Spearman correlation technique. If the sample <= 30 then the correlation value obtained from the calculation results can be directly compared with rho table. Parameter used is if rho count < rho table then Ho accepted, and if rho count > rho table then Ho rejected (Ha accepted). In determining the level of strength of relationships among variables, we refer to the value of correlation coefficient which is the result of SPSS output. Interpretation of Spearman Rank correlation coefficient can be seen in Table 3.

Tabel 3. Interpretation of Spearman Rank Correlation Coefficient.

No	Correlation Value	Interpretation
1	0,00-0,25	Very weak
2	0,26-0,50	Enough
3	0,51-0,75	Strong
4	0,76-0,99	Very strong
5	1,00	Perfect

If n is more than 30, the significance test uses the formula t. To know the value of t is significant or not, it is necessary to compare with table t, with certain error level dk = n - 2 (Sugiyono, 2013).

$$t = r\sqrt{\frac{n-2}{1-r^2}}$$

Where:

ρ/r: Spearman Rank Correlation Coefficient

n : Total Respondents

Results and discussion

Knowledge

Knowledge according to Sunaryo in Wawan & Dewi (2010) is the result of knowing that occurs through the sensory process, especially the eyes and ears against a particular object. The knowledge tested in this study was the knowledge of Banua Botanical Garden visitors.

The visitor's knowledge of 69% was in the category of "know" (the percentage is in the range of> 68-84). The results of this study indicated that the selected visitor respondents have good knowledge or enough to understand about Banua Botanical Garden and the rest have not decided yet. Respondents did not dare to determine its establishment. This doubt could be spontaneous, could also be reflexive or have rational motives (Snijders, 2006).

The questions contained in the knowledge questionnaire have been completely elaborated to explore one's knowledge of Banua Botanical Garden. These questions included about what the Banua Botanical Garden was; the purpose of the Banua Botanical Garden; the benefits of the Banua Botanical Garden; the existence of Banua Botanical Garden in the absorption of CO2 to improve air circulation; what kinds of plant collections were planted; the reason for the selection of plant species planted; Banua Botanical Garden as an effort in environmental conservation; Banua Botanical Garden functions as an environmental service; about Banua Botanical Garden that helped the biological resources of plants in Indonesia in order to be maintained its sustainability; and the existence of Banua Botanical Garden which as one of the green open spaces in Banjarbaru city.

The government's smart idea in establishing Banua Botanical Garden is one of the fresh breezes blown out of the South Kalimantan Provincial office complex, as a vehicle for nature conservation as well as tourist areas, education and environmental services. In addition to responding to the heat of environmental degradation issues in South Kalimantan that are increasingly concerning, it also becomes a truly refreshing breeze of heaven for visitors, especially in Banjarbaru and South Kalimantan. Banua Botanical Garden function that helps the biological resources of plants that exist in Indonesia remain kept in the sustainability.

Knowledge of visitors to this question has been very good, because the respondents already knew the function of the botanical garden as a rescue, development and protection of various local and typical plants of South Kalimantan, such as ironwood trees (*Eusideroxylon zwageri*) whose rate of extinction is higher due to environmental degradation which is increasingly alarming. Similarly, some rare fruit tree species that have been declared extinct in their natural habitat, such as Kelangkala fruit trees (*Litsea angulata*), Binjai (*Mangifera caesia*), Kasturi (*Mangifera casturi*) and others.

The existence of Banua Botanical Garden is one of the green open spaces in Banjarbaru city. It could be seen that the visitors were familiar with the term green open space where green open space is a form of land use in an area devoted to greening crops.

Perception

Perception is a complex cognitive (understanding) process that can give an idea of an object which is very different from its reality, so that it is often appear that the assumption is not according to the object seen. One's perception can be different from one another, though faced with the same object, situation and condition (Muchlas, 1999). One's perception of the environment reflects the way in which the views, admiration, satisfaction, and expectation of the environment are desired. Perception analyzed in this study was visitor's perception of Banua Botanical Garden. Questions from the perception questionnaire were the visitor's rating/responses, where the existing values indicated that the score has met or fallen within the category of good in which the percentage was in the range of > 68-84). The percentage value of visitors was 80%. The questions consisted of the condition of Banua Botanical Garden, the benefits of Banua Botanical Garden which were very helpful as environmental services, spatial planning system, Banua Botanical Garden development in order to support efforts to conserve the diversity of plants in general and Kalimantan in particular, the condition of supporting facilities, the master plan of Banua Botanical Garden, the collection of plants in Banua Botanical Garden, the cost of entrance fees, whether Banua Botanical Garden has been able to provide and improve the insight of respondents about the environment, and whether Banua Botanical Garden could help respondents to know the species of plants that have been rare.

The average respondent's perception of this study indicated that the selected respondents had good perception or enough understanding about Banua Botanical Garden. Perception in the good category was when the visitors have realized that they leaned life on natural resources so they understood that the resources needed to be managed so that the benefits could be obtained sustainably. Entirely, the visitors gave good responses. Of the total area of 100 hectares, currently it is about 30% of the area which has been planted with various plants in accordance with the ploting area. For tree plants (rare), the average age of their planting is only about 3 years, so the trees are still not able to provide shade and protection from the hot weather. Visitors had a good perception of the existence of Banua Botanical Garden as an environmental service. While environmental services are defined as a product that can or cannot be directly measured in the form of natural tourism services, protection of hydrological systems, soil fertility, erosion and flood control, beauty, uniqueness, and comfort (Widarti in Purnomo, 2015).

Most visitors thought that Banua Botanical Garden could provide and improve environmental insight. Simply the visitors explained when visiting Banua Botanical Garden, they could recognize and see directly the herbs of both medicinal plants and other typical plants in Kalimantan.

From the result of perception percentage, most visitors had a certain view that Banua Botanical Garden has been able to help the respondents to know the species of plants that have been quite rare. The response of visitors about the spatial system at Banua Botanical Garden has been very good. According to the Manager, the development of Botanical Garden in Indonesia was also inseparable

from the Green City Development Program (P2KH) for the realization of green open space in urban areas. The realization of green open space in accordance with the mandate of Law Number 26 Year 2007 on Spatial Planning, namely the need for green open space in urban areas by 30 percent of the urban area.

Feedback of visitors to the condition of supporting facilities such as public toilets, garbage containers and parking lots available in Banua Botanical Garden were not good because of inadequate facilities. There were still many complaints from the visitors because there were not many facilities, such as public toilets were very far away, not many garbage containers provided. Need to be a special note for the manager that the convenience of supporting facilities for visitors must be considered. But this could be understood as Banua Botanical Garden is still in the development stage, including in terms of facilities and infrastructures. For the availability of parking space was adequate because it was directed in one place in the field that was large enough.

Visitors supported the master plan which would be created at Banua Botanical Garden. According to Banua Botanical Garden Manager that besides the labyrinth and gazebo, information center building and conservation building would be functioned and built. Master plan of Banua Botanical Garden is a form of green open space development from office area of government of South Kalimantan Province. It was made in order to support the *ex situ* conservation efforts of Indonesian plant diversity in general and Kalimantan in particular. This was necessary, in an effort to establish a balance between the construction of physical facilities and infrastructure. Therefore, the purpose of the masterplan of Banua Botanical Garden is to be the guideline for improvement in the construction of the botanical garden, so it is to obtain comprehensive and sustainable development guidance (Pani *et al*, 2016).

From the perception percentage, most visitors viewed that the collection of plants in Banua Botanical Garden was good although it was still relatively limited. Of the 100 hectares, now 30 hectares have been planted or about 30%. There were plant collection zones that were divided into woody plant zones, fruit plant zones, medicinal plant zones, nephentes plant zones, orchid plant zones, water plant zones, fern-plant zones, dicot zones, monocot zones, gymnosperms zones, natural dye plant zones, spice, volatile and aromatic plant zones. Some thematic parks that have started to look green and fresh with flowering plants were colorful as the fence and steering plants, while in each area of the theme parks although the collection of plants were still relatively limited, but each area has been seen green and refreshing.

Visitors responded well to the absence of entrance fees for anyone visiting the botanical garden, visitors were only asked to be aware of the environment. The absence of fees to enter Banua Botanical Garden is currently due to the absence of Regional Regulation which regulates the retribution of recreational place.

Cleanliness is often one of the most disturbing issues in the tourist area. At first we are able to enjoy the beautiful scenery but because of the junk the beauty of tourist attractions can be reduced. Finally, visitors blame the manager and also blame the government for the discomfort they feel. Yet this also comes from the visitors themselves.

Based on the observation in the field there were still visitors who threw garbage carelessly. By the reason of faraway location of the garbage containers the visitors liked to throw garbage anywhere. Or if they did not want to be seen, they slipped it in an area that was not easily reached by the eyes.

The problem of cleanliness and rubbish is actually simple. If there is awareness of throwing the garbage in place, or storing it in advance until the trash can be found, perhaps the phenomenon of piling up garbage in tourist attractions is not felt anymore. Referring to the opinion of Octaria, *et al.* (2017) on the management of tourist attractions by trying to build a concept of natural tourism of environmental education-based, so that travel activities can involve the participation of visitors so they

become more concerned about cleanliness, environmental sustainability and as a means to solve some problems arising from the visit of travelers.

Attitude

According to Wawan & Dewi (2010), attitude is a predisposition to perform or not to do a certain behavior, attitude is more on a process of individual consciousness. Attitude is also interpreted as a tendency to consistently give pleasant or unpleasant responses to an object; this tendency is the result of learning, not innate or inherited. Attitudes can be positive and can also be negative. In a positive attitude the tendency of action is to approach, to enjoy, and to expect a particular object, whereas in a negative attitude there is a tendency to avoid, ignore, hate and dislike certain objects.

The percentage of visitor attitudes was 67% where the value indicated the neutral category (the percentage was in the range > 52-68). Attitude of a person to something or a region / place closely related to the attitude of keeping, maintaining, and giving special attentions. Attitudes indicated by a person can be used as an assessment in measuring the person's attitude, as well as the attitudes that will be shown by the respondents in keeping and maintaining the Banua Botanical Garden.

A person's attitude can certainly support the development of Banua Botanical Garden itself. Attention of visitors is important in maintaining the existence of Banua Botanical Garden, especially with the attitude of visitors in participating utilize and feel the benefits with the existence of Banua Botanical Garden area. Therefore, the role of visitors in keeping and maintaining the Banua Botanical Garden is needed to feel the function and benefit maximally.

The result of this study indicated that the selected respondents had the attitude of agree or quite understood about Banua Botanical Garden. The statements contained in the questionnaire have been fully elaborated to explore the visitor's attitude about the Banua Botanical Garden.

From the percentage of attitudes most visitors supported the Banua Botanical Garden as one of the alternative tourist attractions, especially in Banjarbaru. Visitors who declared as residents of course strongly agreed with the existence of Banua Botanical Garden, because in addition to adding green open space in the city, it was also a vehicle for environmental tourism.

Visitors generally argued that the conditions contained around the collection of plants still looked less manicured with the abundance of wild plants that grew around the plant so it gave a dirty impression and neither arranged neatly. Therefore, with the assessment would cause an impression that caused visitors became less interested to come and visit. However, the results of analysis indicated that the visitors actually had a fairly high preference to the effort of conservation of plants in nature in order to be more motivating the visitors. It was necessary to re-adjust the condition of existing collection plants in Banua Botanical Garden to give a beautiful and unique impression so many visitors would feel interested to come.

The visitor's attitude regarding the need of not included in keeping, managing and maintaining the Banua Botanical Garden. From the results of the study showed respondents from visitors were more likely to disagree over the statement, which meant that visitors who enjoyed Banua Botanical Garden realizing the obligation indirectly at least in simple terms such as not littering or not damaging the collection of plants in Banua Botanical Garden.

The Relationship between Knowledge and Perception of Visitors of Banua Botanical Garden

The result of correlation analysis between knowledge and visitor's perception toward Banua Botanical Garden by using Spearman Rank (r) analysis was 0,258. This showed that there was a sufficient correlation between the knowledge and perception of visitors toward Banua Botanical Garden; this was because the value of r was in the position of 0.26-0.50 (in accordance with the criterion of correlation

strength level) which meant that the situation was in a quite strong relationship. The value of t arithmetic between the knowledge and the perception of visitors > t table at the level of error 5%, then the null hypothesis (Ho) was rejected. The direction of the relationship between knowledge and perception of visitors was unidirectional, because the correlation coefficient valued positive (0.258). The purpose of this unidirectional relationship was that if knowledge increased then the perception would also increase.

Based on the analysis results, the significance value or Sig. (2-tailed) was 0.047 < less than 0.05 then it meant there was a significant relationship (meaning) between knowledge and perception of visitors to the existence of Banua Botanical Garden. The visitor's knowledge of Banua Botanical Garden at least gave a positive perception.

The circumstances that caused a strong relationship between the two variables, probably because of the notion of perception itself, where perception was a response or view only and was not a real work that could change or increase. Perception itself is essentially a person's perspective on something. While knowledge is someone's output after performing a sensing of certain objects.

The values obtained after performing a percentage calculation of either the knowledge or the perception of visitors already met the elements of good judgment as well. However, a change of mindset or a person's perspective could affect the relationship between the two. Good knowledge did not make a guarantee to give a good perception of something, as well as in the relationship of knowledge and the perception of visitors to the existence of Banua Botanical Garden.

Relationship of Knowledge and Attitude of Visitors toward Banua Botanical Garden

The correlation between knowledge and attitude of visitors toward Banua Botanical Garden was in the result of r equal to 0.222 which meant the strength of relationship was very weak. The direction of the relationship was positive because the value of r valued positive (0.222).

A relationship that has a positive r value means the relationship was unidirectional or synergistic, meaning that the higher the value of the comparator variable the more the type of variables is compared. The value of t arithmetic between knowledge and attitude of visitors < t table was good for the error level of 5% and 1% then Ho was accepted.

The result of analysis between knowledge and attitude of visitors of Banua Botanical Garden showed sig value (2-tailed) equal to 0.088, because signification value was greater than 0.05 or 0.01 hence it meant there was no significant relationship (mean) between knowledge variable of visitors and attitude of the visitors of Botanical Garden.

The very weak correlation that occurred in this connection was in accordance with the statement by Notoatmodjo (2007) that knowledge was a passive form or an internal response, so that a person could have a good knowledge of something but not necessarily did it in a real way. Therefore this knowledge aspect was also called covert behavior.

Relationship of Perception and Attitude of Visitors toward Banua Botanical Garden

Testing a correlation with Spearman Rank stated the relationship of perceptual variables on attitude of visitors toward Banua Botanical Garden correlated very weak, that was equal to 0.153. The direction of the relationship was positive because the value of r was positive (0.153). A relationship that has a positive value r means the relationship is unidirectional or synergistic, meaning that the higher the value of the comparator variable the more the type of variables is compared.

The analysis result of perception with attitude of visitors of Banua Botanical Garden showed the value of sig (2-tailed) equal to 0.243, because signification value was greater than 0.05 or 0.01 hence meaning there was no significant relationship between knowledge of visitors and attitude of visitors of Botanical Garden. The value of t arithmetic between perception and attitude of visitors < t table was good for the error rate of 5% and 1%. This meant Ho was accepted and Ha was rejected.

Conclusion

Based on the results of study that has been implemented, it is obtained the following conclusions:

a. Knowledge of visitors was classified as 'know'. Perception of visitors was quite good and attitude of visitors was classified as neutral.
b. The relationship between knowledge and perception of visitors of Banua Botanical Garden was strongly correlated.
c. The relationship between knowledge and attitude of visitors toward Banua Botanical Garden was weakly correlated.
d. The relationship between perception and attitude of visitors toward the Banua Botanical Garden was weakly correlated.

References

[BAPPENAS] Badan Perencanaan Pembangunan Nasional. 2003. Indonesian Biodiversity Strategy and Action Plan (IBSAP). Jakarta, Indonesia.

Governor's Decree. 2013. Determination of Land Use Status of the Regional Government of South Kalimantan Province NO. 188.44/0131/K UM/2013.

Kusmana C, Hikmat A. 2015. Keanekaragaman Hayati Flora di Indonesia. Jurnal Pengelolaan Sumberdaya Alam dan Lingkungan **5(2),** pp. 187-198.

Levis LR. 2013. Metode Penelitian Perilaku Petani. Ledalero, Maumeri.

Muchlas. 1999. Perilaku Organisasi 1. Aditya Media, Yogyakarta.

Notoatmodjo S. 2007. Promosi Kesehatan dan Ilmu Perilaku. PT. Rineka Cipta, Jakarta.

Octaria P, Mulatsihb S, Ekayani M. 2017. Analisis Kesediaan Membayar Pengunjung Terhadap Paket Wisata Pendidikan Lingkungan di Taman Wisata Alam Wira Garden Kota Bandar Lampung. Jurnal Pengelolaan Sumberdaya Alam dan Lingkungan **7(2),** pp. 122-127.

Pani R, Latifah S, Pradana NF, Ma'rifatullah I. 2016. Kaleidoskop 4 Tahun Kebun Raya Banua Kalimantan Selatan. Pemerintah Provinsi Kalimantan Selatan Badan Penelitian Dan Pengembangan Daerah UPT Kebun Raya Banua. Aswaja Pressindo, Yogyakarta.

Purnomo D, Solihah W, Sumanto SM. 2015. Nilai konservasi dan jasa lingkungan koleksi tumbuhan kebun raya pada kawasan perkotaan. Prossemnas Masy Biodiv Indon **1(8),** pp. 1851-1855.

Riduwan. 2004. Metode Riset. PT. Rineka Cipta, Jakarta.

Sarwono SW. 2002. Psikologi Sosial: Individu dan Teori-Teori Psikologi Sosial Balai Pustaka, Jakarta.

Snijders A. 2006. Manusia dan Kebenaran. Penerbit Kanisius, Yogyakarta. https://books.google.co.id/books?isbn=9792113096.*[01 Desember 2017].*

Sugiyono. 2013. Statistik Nonparametris Untuk Penelitian. CV. Alfabeta, Bandung.

Sujarweni VW. 2014. Metodologi Penelitian. Pustaka Baru Press, Yogyakarta.

Suwartono. 2014. Dasar-Dasar Metodologi Penelitian. Penerbit Andi, Yogyakarta.

Wawan A, Dewi M. 2010. Teori dan Pengukuran Pengetahuan, Sikap dan Perilaku Manusia. PT. Nuha Medika, Yogyakarta.

Witono J, Purnomo R, Usmadi DW, Pribadi D, Asikin D, Magandhi O, Sugiarti D, Yuzammi M. 2012. Rencana Pengembangan Kebun Raya Indonesia. Pusat Konservasi Tumbuhan Kebun Raya Bogor Lembaga Ilmu Pengetahuan Indonesia.