

Study on the Conservation of Forest Orchid and Community Perception towards the Preservation of Ungaran Mountain Orchid in Ex Situ

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Abstract — Forest Ungaran Mountain has a variety of plant diversity, one of which is a kind of forest orchids. Along with the wild hunting of Ungaran mountain orchid as well as the transfer of forest land and land for agriculture, productive plantation and community settlement land, the popuasi and natural habitat for Ungaran Mountain Orchid species is decreasing. This study aims to determine the diversity of forest orchids and peoples perceptions of the preservation of orchids Ungaran mountain ex situ in the village Ngesrep Balong, Limbangan Kendal District. This research is a qualitative descriptive research, with purposive sampling. From the sampling result, it was found that there were 12 species of forest found in 8 genera, 10 of which were epiphytic orchids and two other terrestrial orchids. The perception of the community toward the existence of orchids of the ungaran mounts of Limbangan Kendal and to the conservation efforts of the orchid ex situ is very positive.

Keywords —*Ungaran mountain orchid, conservation, perception*

I. INTRODUCTION

Conservation is defined as protection born from the idea of establishing a protection institution in Europe. Preservation means preserving the remains of natural forests in Europe. In Indonesia, conservation awareness only began in the late 1970s, with the preparation of a draft law on the Conservation of Biological Resources and their Ecosystems, which were only adopted in 1990[1]. Conservation of natural resources today is more directed towards biodiversity conservation. This is because biodiversity is now on the verge of extinction. According to [2]endangered

species need to be saved based on reason, aesthetics, economy and ecosystem stability.

Orchids are very diverse flowering plants belonging to the Orchidaceae family. The existence of species orchids in nature is often threatened with increasing uncontrolle exploitation for economic reasons. The problem of preservation of Ungaran mountain orchids is increasing because orchids are classified as *nontimber forest products* that are quite commercial in Indonesia. According to [3]high exploitation of wild orchids in India because of their use as medicinal plants.

Ungaran mountain orchid is still a primadonna for orchid hobbyists. The existence of wild orchids occupies a high economic value, so many are hunted. However, most of the Ungaran mountain orchid hunters are still reluctant or have difficulty in carrying out conservation or conservation processes. For this reason, ex-situ conservation efforts need to be practiced to prevent the extinction of Ungaran mountain orchid.

[4]is a perspective or assessment, perception including the communication process that arises because of the response to stimulus, and in essence is the view, interpretation, judgment, hope or aspiration of an object.

[5]perception is the result of a process of organizing, interpreting the stimulus received by the senses so that the stimulus is understood and influences subsequent behavior. The factors that influence perception are internal factors including physiological and psychological, and external factors (the existence of a stimulus or a background behind the perception and attention directed to something or a set of objects.

Based on the understanding of these perceptions, it can be seen that the process of perception formation is a process that occurs in individuals. According to Mayo (1998) as cited by [6],society can be interpreted as two

concepts, namely: (1) society as a "common place", that is, the same geographic area and (2) society as "common interests", namely equality of interests based on culture and identity. Community perceptions that are intended in this

II. METHOD

This research is a qualitative descriptive study, which is a study that aims to describe the diversity of natural orchids in the forest of the Limbangan Mountain Resort, Ungaran, Central Java, and the community's perception of the existence of the Ungaran Limbangan Kendal mountain orchid and ex situ conservation of orchids. Data collection in this study was carried out through purposive sampling field observations.

The data obtained were analyzed qualitatively. To measure indicators of perception using a Likert scale that describes certain indicators measured using a score ranging from 1-5 with the following assessment (SS: Strongly Agree) with a score of 5, (S: Agree) with a score of 4, (CS: Simply Agree) with score 3, (TS: Disagree) with a score of

study are perceptions of some individuals who are considered to be able to represent other communities in the same area.

2, (STS: Strongly Disagree) with score 1. The result of the assessment is the number of scores obtained by respondents divided by the maximum score multiplied by 100% [7]

III. RESULTS AND DISCUSSION

Based on a questionnaire given to 20 community respondents living in the village of Ngesrep Balong, it can be seen the level of community perception of the existence of the Ungaran Limbangan Kendal mountain orchid and ex situ conservation efforts. Recapitulation of respondents' answers to the questionnaire given to the social aspects of the existence of mountain orchids Ungaran Limbangan Kendal is presented in Figure 1. as follows,

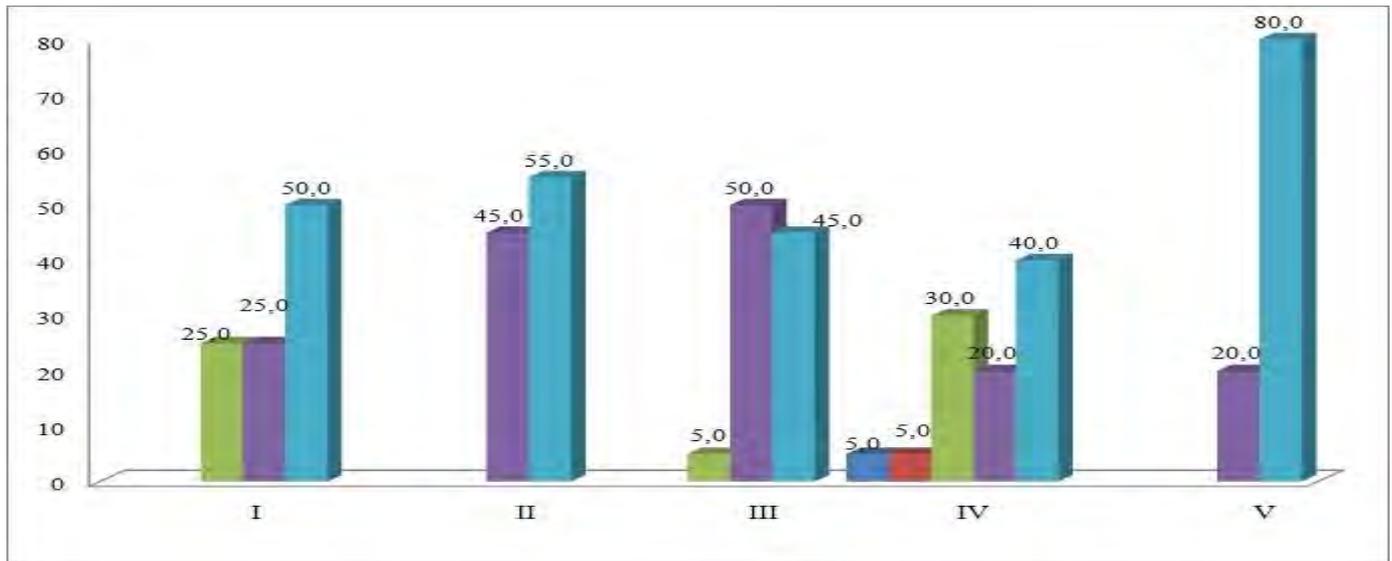


Figure 1. Community Perception of the Existence of Mountain Orchids

Information :

- Strongly Disagree
- Disagree
- Simply Agree
- Agree
- Strongly Agree

- I. Wild orchid plants are still widely found in the mountain forests of Ungaran Limbangan Kendal
- II. Mount Ungaran wild orchid plants have many types
- III. Ungaran mountain orchids live in large trees
- IV. Wild orchid plants have a high selling value
- V. Wild orchids are increasingly threatened

In general, the community's perception of wild orchid plants is still widely found in the mountain forest Ungaran Limbangan Kendal (50%), Mount Ungaran wild

orchid plants have many types (55%), many of the Ungaran mountain orchids live in large trees (45%), Wild orchid plants have a high selling value (40%), wild

orchids are increasingly threatened (80%), these conditions can be concluded that the community understands that many wild orchid plants or mountain orchids in their area are still many. The community also realizes that the existence of wild orchids is increasingly threatened.

Perception is the result of a process in which a person organizes and interprets an object or stimulus so as to obtain a clear picture of the object. In this case, the object that is perceived is the existence of wild orchids in Ungaran Mountain. The picture is obtained through a sensing process, involving information and experiences that either occur to him or others that are obtained so that it influences him in giving the perception.

Public perception of the existence of mountain orchids Ungaran Limbangan Kendal based on the *Coelogyne speciosa*, *Cymbidium sp*, *Calanthe sp-1*, and *Calanthe sp-2*.

Furthermore, community perceptions of the ex situ orchid conservation efforts are presented in Figure 2. As follows,

calculation of the Likert scale obtained 22 points included in the category of very positive, in the range of values (21-25). The perception is very positive because of the knowledge and information obtained by the people who live around the forest area and experience for a dozen years living in the vicinity.

From the sample results obtained that the forest orchids found on Mount Ungaran Limbangan Kendal consist of 12 species from 8 genera, 10 of which are epiphytic orchids and two other types of terrestrial orchids. These orchids are *Dendrobium crumenatum*, *Dendrobium tetradon*, *Dendrobium linearifolium*, *Dendrobium mutabile*, *Agrostofilum bicuspidate*, *Bulbofilum lepidum*, *Vanda tricolor*, *Eria speciosa*,

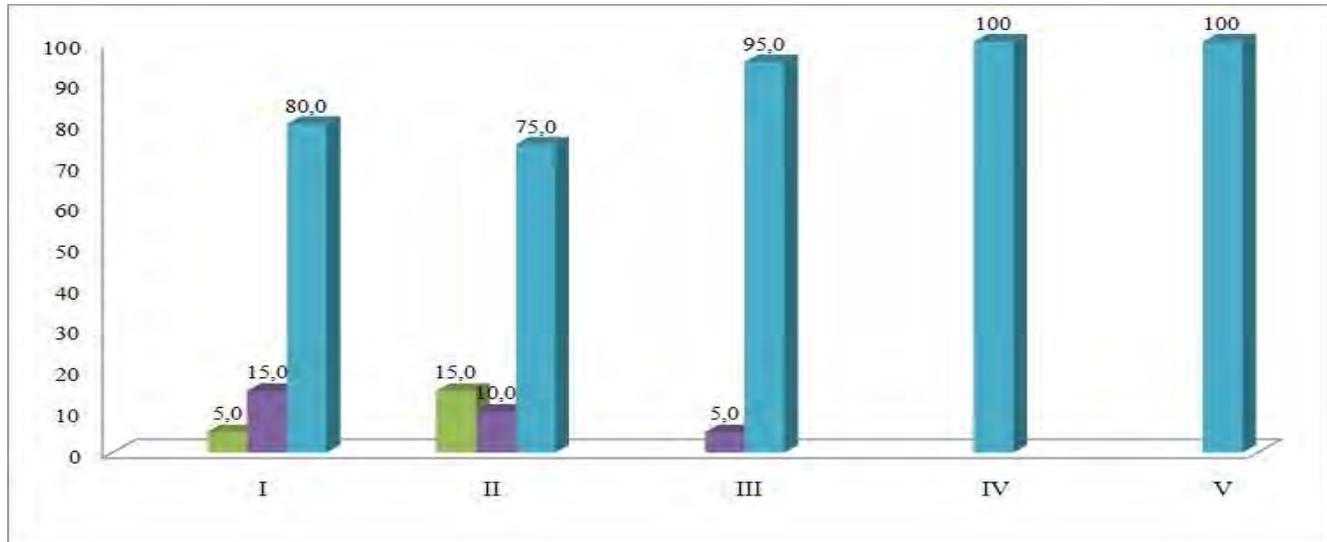


Figure 2. Community perception of ex situ orchid conservation efforts.

Information :

- Strongly Disagree
- Disagree
- Simply Agree
- Agree
- Strongly Agree

- i. Ungaran mountain orchids can be reduced in population due to poaching
- ii. Tree felling can threaten the existence of orchids in their natural habitat
- iii. Conservation is a strategic effort to overcome the damage impact of mountain orchids
- iv. The goal of conservation is to conserve biodiversity that is beneficial to science and Society

- v. Ungaran mountain Forest is an area that must be conserved for the life of orchids and other animals

In general, people's perception of Ungaran mountain orchid plants can be reduced due to poaching (80%), logging can threaten the existence of orchids in their natural habitat (75%), Conservation is a strategic effort to overcome the impact of mountain orchid damage (95%),

Purpose conservation is conserving biodiversity that is beneficial to science and society (100%), Ungaran mountain Forest is an area that must be conserved for the life of orchids and other animals (100%). These conditions can be concluded that the community strongly approves conservation efforts for plants wild orchids or mountain orchids in their area.

Community perception of the mountain orchid conservation effort Ungaran Limbangan Kendal ex situ based on the calculation of the Likert scale obtained 24.45 values included in the category of very positive, in the range of values (21-25).

Ex-situ conservation efforts need to be practiced to prevent the extinction of Ungaran mountain Orchid. The village also has regulations that support this conservation effort, which is contained in the Village Regulation No. 1 of 2007 concerning the environment. Chapter 2 Article 2-5: "Protection of environmental functions and processes and the utilization of their resources are based on independence, equal opportunities for functions and its use, respect for the values that are still valid, the needs of the local community, the preservation of the ability of functions and processes and the utilization of natural resources and other rural environments in a harmonious, balanced, controlled, organized and sustainable manner".

According to [8] there is an urgent need to conserve valuable biological resources in natural habitats that are equipped with conservation using modern methods of conservation such as in vitro conservation, seed storage. A network of institutions involved in orchid conservation coupled with a strong orchid breeding program will increase the use of wise orchids.

IV. CONCLUSION

1. A forest orchid found in the village of Ngesrep Balong, District of Limbangan Kendal Regency consists of 12 species from 8 genera, 10 of which are epiphytic orchids and two other types of terrestrial orchids.
2. Community perceptions of the ex situ conservation of the mountain orchid Ungaran Limbangan Kendal are very positive
3. Ex-situ conservation efforts need to be practiced to prevent the extinction of Ungaran mountai Orchid

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