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Orchids: an indispensable wealth of Odisha

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ABSTRACT

Orchids belong to family orchidaceae. They are monocot and show diversity in morphology. There are about 136 species of orchids are reported from Odisha state. They have sound medicinal and horticultural values. The present study highlights the importance of orchid wealth of Odisha and brings attention towards their conservation.

Orchids are the most beautiful and amazing monocot of the plant kingdom. It belongs to family Orchidaceae (Misra 2014). They are herbaceous plants which generally prepare their own food. The most orchid grow on the trunks or branches of trees called epiphytes (Misra 2007; Misra 2014). Some orchids grow on the ground called terrestrials and very few are saprophytes. Mostly orchids are classified into two types: (i) Monopodial and (ii) Sympodial (Misra 2007; Misra 2014). In India, North-Eastern region, Eastern Ghats, Western Ghats and Sikkim Himalayas are the major habitats of orchid species. Odisha comes under the Eastern Ghats and enjoy about 136 species of orchids belonging to about 49 genera (Misra 2007; Misra

2014). In Odisha, Similipal Biosphere Reserve (SBR) is rich with about 96 Orchid species followed by Rehana Forest Division, Koira and Toda forest division, Mahendragiri hills, Niyamagiri hills, Karlapat Sanctuary, Barbara Research Forest etc (Misra 2011; Misra 2014). Among the Orchid rich habitat of Odisha, the most common high ranges Orchids (Figure 1) are:

1. *Oberonia ensiformis*
2. *Eria meghasaniensis*
3. *Bulbophyllum polyrhizum*
4. *Aerides ringens*
5. *Seidenfia versicolor*
6. *Habenaria grandifloraifermis*
7. *Habenaria crassifolia*
8. *Goodyera procera*
9. *Eulophia spectabilis*

10. *Eulophia graminea*

Among the Orchid wealth of Odisha, some show the medicinal values like *Acampe carinata*, *A. praemorsa*, *Lusia trichorhiza*, *Pholidota imbricata*, *Rhynchostylis retusa*, *Vanda tessellate*, *Vanda testacea* etc are used to cure different type of pain whereas *R. retusa* and *Aerides multiflora* are used against skin infections. Some of Orchid found in Odisha has ornamental values like *Eulophia spectabilis*, *Pecteilis gigantea*, *Phaius tankervilleae*, *Cymbidium aloifolium*, *Cymbidium bicolor*, *Dendrobium aphyllum*, *D. fimbriaefum*, *D. crysanthum*, *Thunia bracteata* *Vanda tessellata* (Figure 3), *Pelatantheria insectifera* etc (Figure 1; Singh et al 2012; Misra 2014). Orchid species are important flowering plant and valuable wealth of Odisha. They also serve as an indicator species for the ecosystem. The anthropogenic activities, over extraction of wild Orchids and deforestation creating negative impacts on their population in the

state .Hence there need a conservation plan from government for their existence in wild.

References

- Misra S. (2007). Orchids of India- a glimpse. Bishen Mahendra pal Singh. Dehradun.
- Misra S. (2014). Orchids of Odisha, A handbook. Bishen Singh Mahendra Pal Singh. Dehradun. pp.1-424.
- Singh S, Singh AK, Kumar S, Kumar M, Pandey PK and Singh MCK. (2012). Medicinal properties and uses of orchids, a concise review. Applied Botany. 52: 11627-11637.
- Misra S. (2011). Floral diversity in Odisha cleistantha S. Misra: a monotypic and endemic terrestrial orchid from India. Ibid. 25(1-2): 13-18.



Figure 1: Collection of medicinal values of orchid from Khurda, Odisha

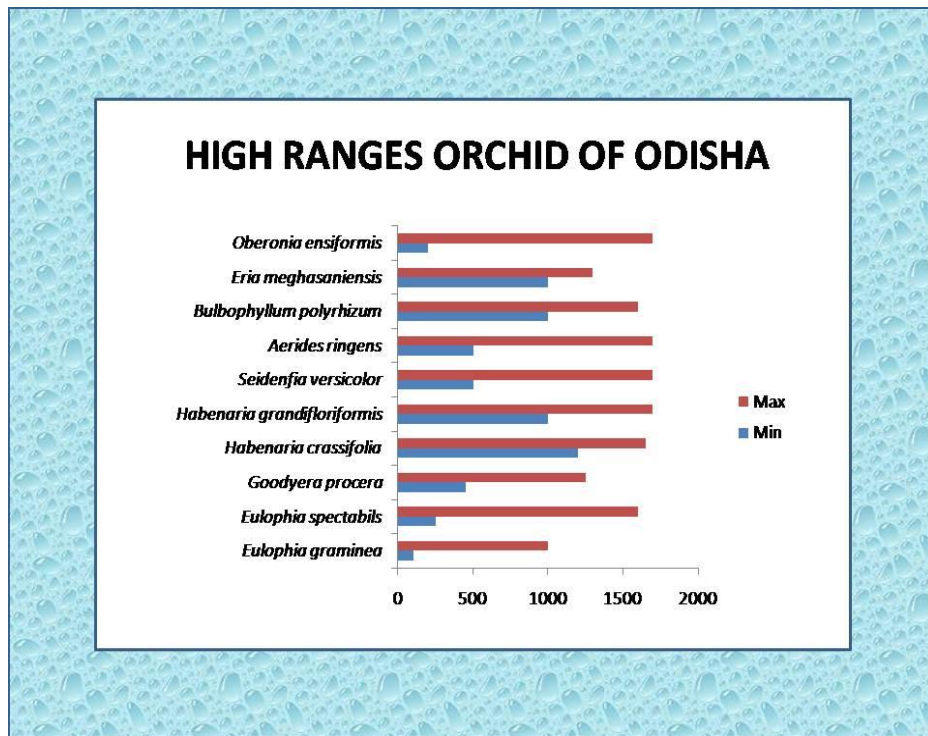


Figure 2: High Ranges Orchids of Odisha



Figure 3: Flowering parts of *Vanda tessellate*