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Important Medicinal climbers of Dhauligiri, Bhubaneswar, Odisha, India

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ABSTRACT

Dhauligiri hill is situated on the river bank of Daya, Bhubaneswar, Odisha. It stands about 8kms distance from the main city. The hill is famous for battle ground of Kalinga war and also known as "Santi Stupa". The study carried out in this area revealed that there are many climbers which are medicinally important. Climbers show unique horticultural uses because of their beauty imparting features. In order to support growth and development these plants evolve various climbing devices as their stems are weak. About 20 type of climbers are enumerated which belongs to different family having sound medicinal values. Discussing with the local people and literature survey, the medicinal uses were noted and presented here. This study revealed that there are many climbers present in Dhauligiri Hill which have traditionally medicinal uses.

INTRODUCTION

From the ancient days when there is no advancement in Science and Technology to the present days, people are using plants or plant parts to treat many diseases (Behera et al. 2016). In this developed world about 80% of people depend on the traditional

medicine for their healthcare (Abbink 1995). In India about 100 species of plants are used as a raw material in the Pharmaceutical industries (Ji 2001). Now a days due to human civilization like industries shifting cultivation, the medicinal

plant species decreases which the use of ethnomedicine also reduced (Behera et al. 2005). It is very necessary to conserve the medicinal plants (Padalia et al. 2004). Odisha is a land of forest ecosystem. There are many of forests like hilly forests, Biosphere Reserves, coastal forests which are rich in medicinal plants. About 62 tribal groups of Odisha depend on these forests for the medicinal plant and their other need (Behera et al. 2016). Several studies have been done on traditional medicine in Odisha. The present study has been carried out basing on the traditional medicinal climbers found in Dhauligiri, Odisha.

MATERIALS AND METHODS

Study area

The Ekamra khetra Bhubaneswar is situated in the Khorda district of Odisha. It is about 65 km away from Bay of Bengal at an altitude 25.9 meters and Latitude of 25 o 15' North and longitude of 85 o 52' West (Behera et al. 2008). The present study was carried out in Dhauli (Santi Stupa) in 2019. The main aim was to study the medicinal climbers and their medicinal uses. The plants were identified by following "Flora of Odisha" by Saxena and Brahmam (1995).

RESULTS AND DISCUSSION

1. *Abrus precatorious* L.

Family: Fabaceae

Common name: Jequirity bean

Local name: Kaincha

Medicinal uses: It is used in the treatment soars and wounds caused by dogs, cat and mice. The roots are used in the treatment of jaundice. Paste of the dry seed is used to cure worm infection. Seeds are also taken for tuberculosis (Garaniya & Bapodra 2014).

2. *Ampelocissus latifolia* (Roxb.)

Planch.

Family: Vitaceae

Common name: Wild grass

Local name: Kanjia-nai

Medicinal uses: The root of this plant is chewed for easy delivery during child birth (Patil & Patil 2005). The root paste of this plant is warmed and used on the wounds (Rahman & Karmakar 2014).

3. *Aristolochia indica* L.

Family: Aristolochiaceae

Common name: Indian birthwort

Local name: Hanslata

Medicinal uses: The root paste of this plant is used to relieve pain. The root powder also used in treatment of snake bite, worm infection etc (Rajashekharan et al. 1989).

4. *Atylosia scarabacoides* (L.) Benth.

Family: Fabaceae

Common name: Indian birth word

Local name: Isharamula

Medicinal uses: Seed paste is used to treat tape worm and skin diseases (Panda 2013). Fresh roots are chewed to get relief from throat problems (Jain et al. 2010)

5. *Cardiospermum halicacabum* L.

Family: Sapindaceae

Common name: Baloon vine

Local name: Kanafuta

Medicinal uses: The herbal leaves of *Cardiospermum halicacabum* L is used to treat gastrointestinal problems like diarrhea and dysentery. It also used as tonic for asthma and cold. The root contains diuretic abilities and used against renal problems (Raza et al. 2013).

6. *Cayratia pedata* (Lour.) Jusc ex. Gagnep.

Family: Vitaceae

Common name: Bird foot grape vine

Local name: Pita Potala

Medicinal uses: The plant part of *C. pedata* is used for the treatment of ulcer, diarrhea and inflammation (Aswathy et al. 2019).

7. *Cayratia trifolia* (L.) Domin.

Family: Vitaceae

Common name: Bush grape

Local name: Ambadilata

Medicinal uses: Powder form of root with black pepper is used to treat boils. Seed and tuber extraction are taken orally by diabetic patients. Tuber paste is used on snake bite (Kumar et al. 2012).

8. *Coccinia grandis* (L.) Benth.

Family: Cucurbitaceae

Common name: Scarlet gourd

Local name: Kunduri

Medicinal uses: Fruits of *Coccinia grandis* is used to treat leprosy asthma and jaundice Root paste is used to relief from joint pain and the leaf paste is used on skin to treat scabies (Taur & Patil 2011).

9. *Dioscorea oppositifolia* L.

Family: Dioscoreaceae

Common name: Indian yam

Local name: Pitali kanda

Medicinal uses: Boiled tuber is given to the women after child birth to revive their strength. The leaf paste is used to treat ulcer. Mixture of root powder and cow urine is used on the scorpion bite. Tubers are also used to treat indigestion (Kumar et al. 2017).

10. *Dioscorea wallichii* Hook.f.

Family: Dioscoreaceae

Common name: Fibre Yam

Local name: Suta aalu

Medicinal uses: Mixture of tuber powder and honey taken orally. The tuber also used for stomach pain (Paul et al. 2017).

11. *Gymnema sylvestre* (Retz.) R. Br.

Family: Apocynaceae

Common name: Australian cow plant

Local name: Gudamari

Medicinal uses: Leaves of this plant are used for the treatment of diabetics and diuretic. It also used as anthelmintics and anti-inflammatory (Agnihotri et al. 2004).

12. *Ipomoea pes-tigridis* L.

Family: Convolvulaceae

Common name: Tiger's paw

Local name: Baghapada

Medicinal uses: Tribal people used its leaves to heal sores and boils (Pratap et al. 2011). Leaf pastes apply on face to cure pimples. Mixture of seed paste and coconut oil is used to heal wounds (Shanmugam et al. 2012).

13. *Jasminum arborescens* Roxb.

Family name: Oleaceae

Common name: Star jasmin

Local name: Chameli

Medicinal uses: Leaf juice with black pepper and garlic acts as an emetic and used in obstructions on bronchial tubes (Verma & Chahuan 2007).

14. *Mikania micrantha* Kunth.

Family: Asteraceae

Common name: Bitter vine

Medicinal uses: It is used to treat cuts and nausea. As it has the antimicrobial and antibacterial properties, these plants are used as medicine. Leaf juice is used on snake or scorpion bite (Day et al 2016).

15. *Passiflora foetida* L.

Family: Passifloraceae

Common name: Stinking passion flower

Local name: Gandhatamala

Medicinal uses: Vietnamese use the dry leaf in tea to relieve sleeping problems. It also used in treatment of cough and itching (Tanaka et al. 2007).

16. *Pergularia daemia* (Forssk.)

Choiv.

Family: Apocynaceae

Common name: Hair knot plant

Local name: Utururdi

Medicinal uses: This plant is used to treat jaundice, anthelmintic, laxative and also to cure diarrhea (Karthishwaran & Mirunalini 2010).

17. *Solena amplexicaulis* (Lam.)

Gandhi.

Family: Cucurbitaceae

Common name: Creeping cucumber

Local name: Bana Kunduri

Medicinal uses: Root paste is used to treat gonorrhoea. Mixture of root juice, cumin and milk is used to treat spermatorrhoea. Leaves are used in skin diseases (Mishra et al. 2013).

18. *Tinospora cordifolia* (Willd.)

Miers.

Family: Menispermum

Common name: Heart leaved moonseed

Local name: Guduchi

Medicinal uses: It cures bleeding, itching and erysipelas. The facula is used to treat cold fevers, diarrhea, skin diseases, diabetics etc (Sinha et al. 2004).

19. *Combretum indicum* (L.)

DeFillipps.

Family name: Combretaceae

Common name: Rangoon Creeper

Local name: Madhu malati

Medicinal uses: Flower of *Combretum indicum* L. is used in treatment of stomach-aches and headaches. Leaf is used to treat dysentery, ulcer and gastric pain whereas seeds act as antiseptic and diarrhoea (Sahu et al. 2012).

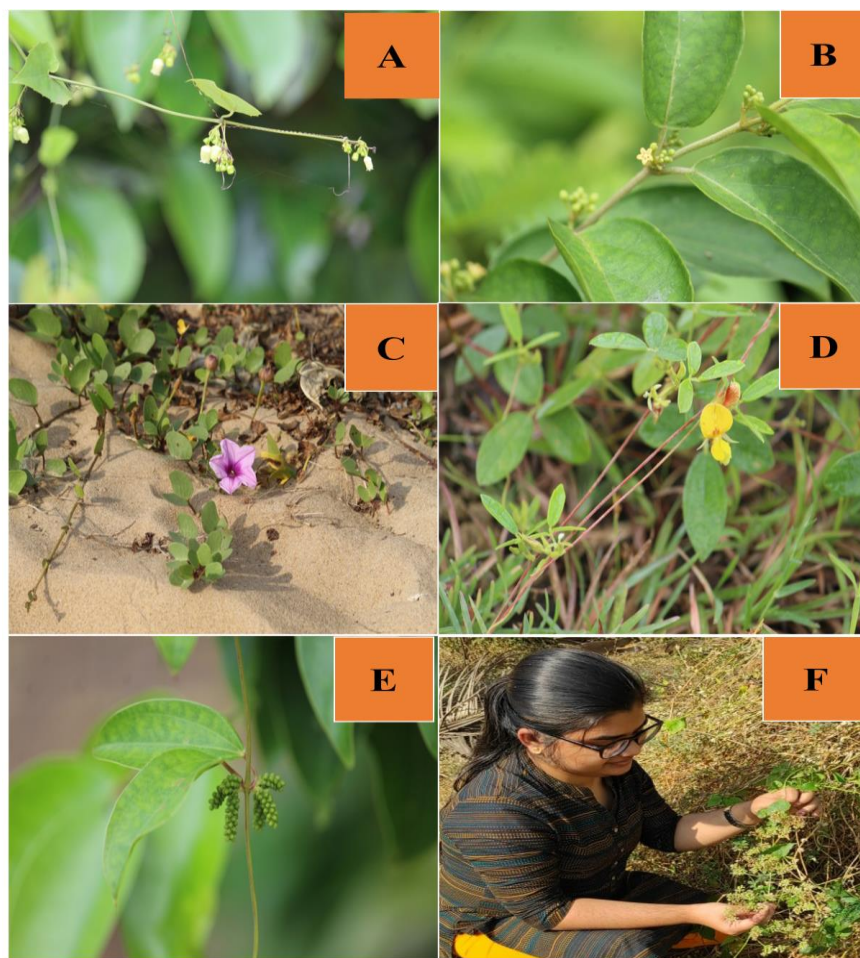


Plate 1: A) *Solena amplexicaulis*; B) *Gynema sylvestre*; C) *Ipomoea pes-tigridis*.; D) *Atylosia scarabacoides*; E) *Dioscorea oppositifolia*; F) Field works with *Mikania micrantha*

CONCLUSION

The study revealed that, Dhauligiri enjoys diverse climbers which are used as medicine. The local people collect the medicinal plants and use for their healthcare. Mostly the medicines are prepared from fresh material and used in the form of juice, powder or paste. Root, leaves, fruit and flowers are mostly collected material to prepare medicine. The seasonal climbers are collected and preserve for future use. So local people should be encouraged to cultivate the medicinal climbers and to conserve them.

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