



Research Paper

**FIRST REPORT OF *Dendrophthoe falcata* (L. F.) ETTINGSH AS
PARASITIC PLANT GROWING ON POMEGRANATE (*Punica granatum* L.)
FROM MAHARASHTRA, INDIA**

Kamble. V. W., Sonje. S. B., Vanmare. D. J. and Bhuktar. A. S.

Department of Botany,
Vivekanand Arts, Sardar Dalip singh Commerce & Science College,
Samarth Nagar, Aurangabad-431001, (MS),
India.

Dendrophthoe falcata (L.f.) Ettingsh is evergreen, shrubby, partial parasites, which are distributed in the tropical and sub-tropical regions of the world. Under the family Loranthaceae, it is a parasitic plant found over different common trees like neem (*Azadirachta indica*), mango (*Mangifera indica*), guava (*Psidium guajava*), sugar apple (*Annona squamosa*), etc. in all over India. The whole plant is used in indigenous system of medicine as cooling, bitter, astringent, aphrodisiac, narcotic and diuretic and is useful in pulmonary tuberculosis, asthma, menstrual disorders, swelling wounds, ulcers, renal and vesical calculi and vitiated conditions of kapha and pitta. [1] & [2].

During present investigation, Pomegranate tree (*Punica granatum* L.) was found to be infected with *Dendrophthoe falcata* (L. f.) Ettingsh and crown gall were also developed over the pomegranate branches (**Plate 1**) were collected from District Aurangabad during February, 2016 and subsequently identified with the help of Flora of Marathawada, Vol.-II [3]. Herbarium of plant specimen has been deposited at VH Herbarium, Department of Botany, Vivekanand Arts, Sardar Dalip singh Commerce & Science College, Samarth Nagar, Aurangabad, (MS) India with **Accession No. 04493 and 04494**.

[4] In Sitheri hills a considerable parasite on the Silver Oaks (*Grevillea robusta* A. Cunn. ex. R.Br.) and pomegranate (*Punica granatum* L.) and *Dendrophthoe falcata* (L. f.) Ettingsh general 40 hosts observed in Tiruchirappalli city areas. [5] Reported the occurrence of a new partial/semi-stem parasite, Loranthus (*Dendrophthoe* sp.), observed on pomegranate cv. Kesar around the Badami area of the Bagalkot district in northern Karnataka, India.

However, *Dendrophthoe falcata* (L. f.) Ettingsh till date has not been reported on pomegranate from Maharashtra state. Moreover, it is first time reported on Pomegranate plant from District Aurangabad, Marathwada Region of Maharashtra, India.

PLATE 1



A. Parasitic growth of *D. falcata* (L. f.) Ettingsh on Pomegranate.



B. Fruits and Gall formation.



C. Twig of *D. falcata* (L. f.) Ettingsh



D. Herbarium

ACKNOWLEDGEMENTS:

We are grateful to Dr. B. S. Solunke, Principal, Vivekanand Arts, Sardar Dalipsingh Commerce & Science College for providing the Laboratory facilities.

REFERENCES:

- [1]. **Dubey. G, Kumar. D, Tiwari and Tripathi. K., (2013):** Comparative Evaluation of Anti-depressant Activity of Leaves Extract of *Dendrophthoe falcata* Collected from Two Different Host Trees, *International Journal of Pharmaceutical and Phytopharmacological Research*.
- [2]. **Anarthe. S. J., Bhalke. R. D., Jadhav. R. B and Surana. S. J., (2008):** Antidiabetic Activity of Stems of Hemiparasite *Dendrophthoe falcata* Linn. Parasitic Growing on *Mangifera indica*, *Dhaka Univ. J. Pharm. Sci.* 7(2): 177-180,
- [3]. **Naik V. N. (1998):** Flora of Marathwada Vol.-II, *Amrut Prakashan*, Stn. Road, \ Aurangabad.Pp. 769.
- [4]. **Vijayan. A, Santhakumar. S, Vivekraj. P and Kalavathy. S., (2015)** Parasitism of host trees by the Loranthaceae in the region of Sitheri Hills (Eastern Ghats), Tamil Nadu, *India, Bull. Env.Pharmacol. Life Sci.*, Vol 4 [3] P: 104-109
- [5]. **Jawadagi, R. S., Jamadar, M. M., Pattar, P. S. and Inamdar, A. M (2011):** Parasitism of Loranthus on pomegranate (*Punica granatum* L.) - a new host record from North Karnataka (India), *Journal of Plant Disease Sciences* Vol. 6 No. 1 pp. 81