## RECORD OF FLEMINGIA SEMIALATA ROXB. AS A LAC HOST

P. Kumar, S. Ghosal, S.C. Srivastava, B.P. Singh and S.K. Jaipuriar Indian Lac Research Institute, Namkum, Ranchi, India.

## Abstract

Flemingia semialata was evaluated for its potentiality as a lac host and was found promising host for intensive lac cultivation.

## Introduction

Out of 15 species of the genus Flemingia. Roxburgh ex Aiton f. syn. Moghania Jaume St-Hil. (Family Leguminosae, subfamily Papileonaceae) reported so far, Flemingia macrophylla (Willd.) O.Ktze., F. chappar Ktze. and F. strobilifera R.Br. have already been reported as host of Indian lac insect Kerria lacca Kerr (Glover, 1937; Roonwal et al., 1958; Purkayastha and Prasad, 1962 and Kumar and Srivastava, 1990).

Seeds of F. semialata Ro. b. were procured from ICRISAT, Hyderabad to evaluate their potentiality as a lac host. Seedlings raised in well prepared nursery beds during May-June were transplanted in July in the pits dug during May-June to ensure proper weathering of the pits followed by refilling it with mixture of soil, FYM and aldrin dust. Spraying of insecticides and weeding operations were undertaken as and when required. Next year, plants were inoculated during June-July with both the strains of lac insect, i.e., kusumi and rangeeni for raising aghani and katki crops respectively.

It has been observed that one year old plant attains a height of 104.4 cm with 1.1 cm diameter, 68.8 cm canopy spread, 6.1 tillers and 493.2 cm length of inoculable shoots. Plants accepted both the strains of lac insect, though the performance of kusmi strain was better than that of the rangeeni. However, thick lac encrustations, almost equivalent to that obtained from Kusum was obtained from the aghani crop (Fig. 1). Summer crop of both the strains did not perform well on this host species. Post harvest observation indicates that the subsequent progenies were fertile. With proper management practices, it could emerge as a promising host for intensive lac cultivation on plantation basis.



Plate 1. Flemingia semialata showing lac encrustation.

## References

Glover, P.M. (1937). Lac cultivation in India. Indian Lac Research Institute, Namkum, Ranchi, Bihar, India. 148 pp.

Kumar, P. and Srivastava, S.C. (1993). Record of Flemingia strobilifera R.Br. as a lac host. The Indian Forester, 119 (9): 762-764.

Purkayastha, B.K. and Prasad, U.N. (1962). Preliminary trials on M. chappar Kuntze, an unrecorded shrub with kusmi strains of lac insect. Sci. and Cult., 28 (4): 541-542.

Roonwal, M.L., Raizada, M.B., Chatterjee, R.N. and Singh, B. (1958). Descriptive account of the host plant of the lac insect (Laccifer lacca Kerr) and the allied plants in the Indian region. Indian Lac Cess Committee, Ranchi, India. 140 pp.