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## (II)

RECORD OF *FLEMINGIA STRICTA* AS A LAC HOST

## Introduction

Out of 15 *Flemingia* species, shrubs or under shrubs (Family : Leguminosae) *F. macrophylla*, *F. chappar* and *F. strobilifera* have been recorded as minor host for lac insects (Glover, 1937; Purkayastha and Prasad, 1962).

*Flemingia stricta* Roxb., a scarcely branched annual shrub attaining 1.8-3.0 m high with large 3-foliolate leaves, axillary racemes of flowers, distributed almost throughout valley forests in shade, in Dehra Dun, Sikkim, Assam, Burma, Coromandal coast, Singhbhum rare in Ranchi (Bihar) ascending to an altitude of 450-600m; leaflets - secondary nerves 12-20 pairs, Racemes cylindrical supported at their base by numerous hairy bracts. Buds pistitate upper bract brown, deciduous when flowers expand in January-February. Pods oblong usually 2 seeded plants best raised from

seeds soon during rains (Brandis, 1978; Hains, 1910; Hooker, 1979).

## Materials and Method

Seed of *F. stricta* collected from ICRISAT, Hyderabad were sown during May-June in well prepared nursery beds and seedlings were transplanted in the field during June-July. After one year, 18 and 29 plants were inoculated during June-July each for Katki and Aghani crops respectively.

The 't' test analysis (Campbell, 1974) was done for estimating the differences between the mean values of different growth characters and lac yield for both the crops.

## Observations

*F. stricta* has been recorded for the first time as a lac host for both *Rangeeni* and *Kusmi* lac insects (Fig.). The 't' test analysis



Kusmi (left) and Rangeeni (right) lac crop on *Flemingia stricta* Roxb.

showed non-significant differences both for plant growth characters and lac yield, though the lac yield performance was better in Aghani crop than the Katki (Table 1). It

is inferred that this plant species is suitable for Aghani crop of *Kusmi* lac insects. Further study in progress.

Table 1

Estimation of difference between the mean values of plant growth attributes and scrap lac yield on *Flemingia stricta*

Strain of lac insect	Crops	Growth attributes of host plants				Stick lac yield (g)
		height	Inoculable shoot length (cm)	Basal diameter on 3rd node (cm)		
<i>Rangeeni</i>	Katki Mean	$\bar{x}$	171.55	2825.55	1.04	20.39
	$n_1 = 18$	$\pm$ SE	6.383	336.818	0.033	4.80
		SD	27.08	1439.4	0.142	16.79
<i>Kusmi</i>	Aghani Mean	$\bar{x}$	177.24	2478.55	1.131	80.83
	$n_2 = 29$	$\pm$ SE	3.193	140.43	0.0368	15.01
		SD	17.196	756.24	0.198	
	SE diff.	SD	$\pm 6.44$	$\pm 320.109$	$\pm 0.05367$	$\pm 16.326$
	t value		0.495 (NS)	0.613 (NS)	0.0708 (NS)	0.625 (NS)

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