

Incidence of leafhopper, *Amrasca splendens* (Ghauri) in mango

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Leafhoppers are serious pests of mango at flowering and fruiting stages resulting in yield loss up to 100 per cent (Verghese, 2000). The hopper activity coincides with the maximum emergence of inflorescence and new shoots. Both nymphs and adults suck sap from tender leaves, buds, flowers, flower stalk and fruits. Severely infested leaves become curled, and inflorescence gets dried which cause non-setting of flowers and dropping of immature fruits, thereby reducing the yield (Srinivasa *et al.*, 2017). Species of leafhoppers infesting mango are *Idioscopus nitidulus*, *Idioscopus nagpurensis*, *Amrasca splendens*, *Amritodus atkinsoni* and *Idioscopus clypealis* (Virakthmath, 1989; Girish *et al.*, 2019). During our field visits, we found severe incidence of mango leaf infesting hoppers and hence sampling was done to assess the level of population.

A sampling was done at University of Agricultural and Horticultural Sciences, Shivamogga, College of Agriculture campus, Navile, Shivamogga, Karnataka (13° 58'N ; 75° 35' E, 588 msl). Five trees of mango of same age (20 years old) were randomly selected in the orchard. Leafhoppers was sampled in the mango orchard at 10:00 AM by using insect sweep net (Figure 1) during the month of April 2021.

Sampling was done by sweeping the insect net five times in each direction of the tree (East, West, North and South). After sweeping, the leafhoppers were collected by inserting head (collector) into the net (Figure 2) and sucked into aspirator (Figure 3). Then the leafhoppers were killed by transferring to the poison bottle. Finally, the leafhopper collected were transferred to 5 ml plastic vials containing 70 per cent ethyl alcohol, labeled and counted. The specimens were sent to Dr. C. A. Virakthmath, Emeritus Professor, Department of Entomology, UAS, GKVK, Bengaluru for species identification. The leafhopper specimens were confirmed as *Amrasca splendens* (Figure 7).

The population of *Amrasca splendens* ranged from 15.75 to 72.0 hoppers per five sweeps (Table 1). Due to severe population and feeding by leafhoppers, tip burning was noticed (Figure 4) which is a typical *Amrasca* damage with leaves dried (Figure 5). All the infested trees were devoid of fruit bearing leading to complete loss (Figure 6). There was no fruit set in more than 20 trees in the orchard out of 35 trees of different varieties due to its feeding damage. Literatures from previous studies indicated *Amritodus atkinsoni*, *Idioscopus nagpurensis* and *Idioscopus nitidulus* were major leafhopper species infesting mango but *Amrasca splendens* was

considered minor. But in this report, *Amrasca splendens* was observed to be serious one. The study may help to standardize the sampling

technique for leafhoppers in mango and also to analyze the severity of its incidence.



Figure 1. Sweep net sampling for mango leafhoppers



Figure 2. Collection of leafhoppers by inserting head with aspirator in mouth

Table 1. Incidence leafhoppers in mango by using sweep net method of sampling

	Number of leafhoppers per five sweeps				
	East	West	North	South	Average number of leafhoppers per five sweeps
Tree-1	57	28	62	71	54.5
Tree-2	15	14	21	13	15.75
Tree-3	64	72	58	62	64.0
Tree-4	43	51	38	58	47.5
Tree-5	82	78	62	66	72.0



Figure 3. Aspirator used for collection



Figure 4. Apical tip burning of leaves



Figure 5. Typical Amrasca damage



Figure 6. Mango tree with *Amrasca splendens* damage devoid of fruit bearing



Figure 7. *Amrasca splendens* (Ghauri)

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