

Isabgul (*Plantago ovata*) Seeds - A New Host of Cigarette Beetle (*Lasioderma serricorne*, Fabricius)

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Isabgul (*Plantago* sp.) is cultivated chiefly in India, France and Spain. This crop is traditionally cultivated in North Gujarat. It is cultivated in 18,000 hectares and has a production of 16,000 metric tons. Isabgul husk is exported to U.S.A. and other countries to the tune of Rs. 120 million.

Cigarette beetle is a polyphagous pest having wide host range. Bhaldia (1974) has reviewed the information on the stored products damaged by the cigarette beetle and reported that it feeds on various commodities.

Isabgul seeds when subjected to germination in the laboratory, some of the seeds were found to be infested with *Alternaria* fungus, which gave poor germination of the seeds. Hence, it was thought to study the effect of different organic and inorganic fungicidal seed dressers on germination and growth of isabgul seeds. Twenty-five grams of treated seeds were stored in polythene

TABLE 1

Feeding response of *L. serricorne* to isabgul seeds treated with different fungicides.

Seed dresser	Concentration (as such)	Initial seed weight in g	Seed wt. after 9 months of storage		Per cent loss in weight of seeds after sieving
			Before sieving (g)	After sieving (g)	
P.M.A. + E.M.C. (Agrosan-GN)	0.3%	25	23.5	23.0	8.00
Carbendazim					
(Bavistin 50% W.P.)	0.2%	25	22.5	20.5	18.00
Benomyl (Benlate 50% W.P.)	0.2%	25	23.0	22.5	10.00
PCNB (Brassicol 75% W.P.)	0.2%	25	22.0	20.5	18.00
Captan (Captan 83% W.P.)	0.2%	25	25.0	25.0	0.00
P.M.A. (Ceresan)	0.3%	25	21.5	17.5	30.00
Mancozeb					
Dithane M-45 80% W.P.)	0.2%	25	25.0	25.0	0.00
MTD (Thiram 75% dry)	0.3%	25	25.0	25.0	0.00
E.E.M.H. (Tillex)	0.2%	25	23.7	23.0	8.00
Check		25	17.0	8.0	68.00

bags. After nine months of storage of seeds, these bags were examined. It was found that the seeds were damaged by the grubs of *Lasioderma serricorne*, Fabricius. Review of literature showed that isabgul has not been reported as a host of this beetle.

To observe the extent of damage caused by *L. serricorne*, the seeds were weighed before and after sieving. The results obtained are presented in Table 1.

Results indicate (Table 1) that the maximum per cent loss in weight was observed in check whereas Captan 0.2%, Dithane M-45 0.2% and Thiram dry 0.3% treated seeds were com-

pletely free from the damage of the beetles. The per cent loss in weight in Agrosan, Tillex, Benlate, Bavistin, Brassicol and Ceresan treated seeds varied from 8 to 30. This preliminary study indicates that the beetles do not prefer Captan, Dithane M-45 and Thiram dry treated seeds.

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REFERENCE

- Bhalodia, N. K. 1974. Biology of cigarette beetle (*Lasioderma serricorne*, F.) (Anobiidae: coleoptera) and its feeding response to different types of tobacco. M.Sc. (Agri.) thesis, Gujarat Agricultural University, Anand Campus, Anand (G. S.).