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OCCURRENCE OF A NEW INSECT, SMALL BROWN PLANT HOPPER LAODELPHAX STRIATELLUS (FALLEN), IN INDIA

In July 1978, some small brown plant hoppers were seen on rice nursery (variety 'Jaya') in the farmer's fields near Ludhiana (Punjab). These could be distinguished from white-backed plant hopper by coloured scutellum as against white. The scutellum was black/brownish black in males and pale yellow with greyish tinge in females. The adult specimens of this insect sent to the Commonwealth Institute of Entomology have been identified as Laodelphax straitellus (Fallen) (Delphacidae: Homoptera). From the published reports it appears that this insect is a new record from India¹⁻².

L. striatellus commonly occurs in Taiwan, Japan, Korea, China and the Palearctic regions. It causes considerable direct damage to the rice crop in these countries. It is also a vector of rice stripe, the most serious virus disease of the East Asian countries and also transmits the rice black-streaked dwarf virus¹.

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A SIMPLE METHOD FOR INDUCING SPORULATION IN HELMINTHOSPORIUM GRAMINEUM IN CULTURE

Helminthosporium gramineum Rabh. the incitant of stripe disease is known to parasitize barley wherever the crop is grown. The fungus sporulates abundantly on the host under natural conditions but it fails to sporulate when isolated in pure culture. A wide variety of artificial media at different temperatures, pH, carbon and nitrogen sources did not induce sporulation in all the seven isolates of H. gramineum collected from different places in India². Conidia could be produced in culture through the combined effect of light and temperature and none of the media was found superior to P.D.A. (Potato Dextrose Agar)¹

In the present investigations, low temperature treatment induced sporulation in all the three isolates, collected from around Agra differing in morphology and nutrition, grown on Czapek's Dox Agar as well as on Potato Dextrose Agar. The fungus culture was first kept in the refrigerator at $6 (\pm 1)^{\circ} C$ for 7 days and then was incubated in reversible incubator maintained at $28 (\pm 1)^{\circ} C$ for 5 days. The sporulation was obtained throughout the year.

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LEVEL OF GLUCOSE AND FRUCTOSE IN HYPHAE OF TWO FRUIT ROT CAUSING FUNGI

Concentration of glucose and fructose present in the mycelium of two fruit rot causing fungi, i.e., Alternaria tenuis Auct. and Helminthosporium spiciferum (Bain) Nicot as influenced by the amount of sugar present in the substratum was determined. Besides the carbon source, the basal medium comprised KNO₃, 3.5 g, KH₂PO₄, 1.75 g and MgSO₄ · 7H₂O₅, 0.75 g. The amount of hexose sugar (glucose/fructose) used was 10 or 20 g/litre. Estimation was carried out in 12 days old dry mycelium (Snell et al.⁵).

Results (Table I) indicate that in A. tenuis, with the increase in the level of hexose sugar in the medium, there was a rise in the amount of glucose/fructose utilized as well as dry weight of the mycelium. Although the mycelial output increased, yet it was

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