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COMPARATIVE ANALYSIS OF PROTEINS IN THE EGGS OF THE BROWN PLANTHOPPER *NILAPARVATA LUGENS* (HOMOPTERA: DELPHACIDAE) OCCURRING IN SRI LANKA AND THE PHILIPPINES

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The control of the brown planthopper (*Nilaparvata lugens* (Staol) is rendered difficult by its ability to evolve new biotypes that can attack paddy varieties formerly resistant to this pest. A simple technique for ready identification of new biotypes of *N. lugens* will render possible the timely search for more effective methods of control. Life-history studies of *N. lugens* of Sri Lanka and biotype 1 from the Philippines revealed a significant difference in the longevity of the macropterous adults (Rajendram & Daniel 1976). Thin-layer chromatographic analysis of free amino acids in the eggs of these two populations indicated a significant difference in the quantity of lysine, one of 4 free amino acids detected in both populations (Rajendram & Daniel 1977). The present paper records the results of electrophoretic analysis of the two egg extracts, carried out on cellulose acetate strips.

Proteins with relative mobilities of 0.5 and 0.6, computed in relation to the indicator dye bromophenol blue, were detected in both egg extracts. A band in the cathodal direction, with a relative mobility of -0.4, was also observed in the two extracts. Hence proteins, as detected by the present technique, do not differ qualitatively in the egg extracts of *N. lugens* of Sri Lanka and biotype 1 of the Philippines.

References :

1. Rajendram, G. F. & Daniel, D. J. E. 1976. Proc. SLAAS 32:72.
2. *idem* 1977. Proc. SLAAS 33:48.