amino acids was made by the procedure of Rosen and expressed in terms of glycine. Tryptophan was detected in the alkaline hydrolysate of the seed powder.

The free amino acids of the wild leguminous seeds were determined and it was found that each seed has its own amino acid pattern. In general, α-amino-isobutyric acid, lysine and tyrosine could not be detected in most of the seeds. Other amino acids seem to be present in varying amounts. The contents of the total free amino acids (expressed as mg glycine/100 mg defatted seed powder) are as follows: (1) Bauhinia purpurea, 0.290; (2) Cassia glauca, 0.133; (3) Delonix regia, (red flowered) 0.266; (4) Delonix regia (yellow flowered), 0.317; (5) Pongamia pinnata, 1.120; (6) Prosopis juliflora, 0.464; (7) Sesbania grandiflora, 0.93.

One of the reasons for the variation in the total free amino acid content could be due to the various stages of maturity of the seeds at the time of their collection and also to the rate of protein synthesis during seed ripening. All the seeds analysed except those of Bauhinia purpurea and Cassia glauca reveal the presence of one unidentified ninhydrin positive compound. Attempts are being made to isolate and characterize them.

Results of the protein-bound amino acid analysis (Table I) reveal that all the seeds contain practically all the essential amino acids although not in adequate quantities as recommended by FAO. However, it is noteworthy that protein hydrolysates of all the seeds show appreciably high concentration of aspartic and glutamic acids. Bauhinia purpurea shows a higher concentration of proline than any other seed.

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ON THE INCIDENCE AND EFFECTS OF INFESTATION OF SELENOThRIPS RUBROCINCTUS (GIARD) (THYSANOPTERA: HELIOThRIPINAE) ON THE FREE AMINO-ACIDS OF SOME SUSCEPTIBLE HOST PLANTS

The increasing incidence of Selenothrips rubrocinctus the red-banded thrips, the notorious cacao and cashew pest of the West Indies in this country would appear to be of particular interest in view of the recent discovery of infestations of this species on very young plants of Mangifera indica, Eugenia jambos, Psidium guajava and Anacardium occidentale from Kerala. First recorded by Moulton\(^1\) in 1928 as stray individuals on flowers of Aporosa and Cardenia in Calcutta and subsequently on cashew in 1931 by Ramakrishna and Margabandhu\(^2\), this species was noticed in considerable numbers on wild species of Jatropha, a common hedge plant all over Kerala in 1964 by Ananthakrishnan. The sudden spread of this species which interestingly enough has taken to some of its typical host plants in Trinidad, like guava, Terminalia, cashew, mango (Williams, 1918\(^3\)), can stand comparison with Retithrips syriacus (Mayet) first recorded by Seshadri and Ananthakrishnan\(^4\) (1953) in this country and which since then extended its activity to no less than 25 hosts, some susceptible, others tolerant to attack. In view of grapevine, Terminalia catappa and Eugenia jambolana also being known hosts in Trinidad, the prospects of Selenothrips competing with Rhipiphorothrips crenuatus and Retithrips syriacus for such hosts cannot be ignored. Alongside with Caliothrips indicus (Bagnall) and the above two species, Selenothrips can easily be expected to occupy the status of a serious polyphagous pest. Further, in view of the confirmed occurrence of this species on host plants in different parts of Kerala, combined with the tendency of this species to breed prolifically on the leaves of its wild host suggests the possibility of its migration to other hosts. The nymphs of this species can at once be recognized by the bright red band across the body, while the adults possess a highly polygonally reticulate body with needle-like terminal antennal joints and broad wings with dark strong, stiff setae.

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