

8. Morisawa, M., *Quantitative geomorphology—some aspects and application*. Publications in Geo-

morphology, State University of New York, Binghamton, 1972.

ANNOUNCEMENT

SEMINAR ON CHITIN INHIBITORS 14th December 1983, Madras

A Seminar on Chitin Inhibitors, organised by the Fredrick Institute of Plant Protection and Toxicology, Padappai was held on 14.12.1983 at Indag House, Spur Tank Road, Madras 31. Dr Maas, General Manager and Mr S M Ishpahani of Duphar B V Amsterdam, leading scientists in India who have done research on Chitin Inhibitors besides Research scientists and Officials from Pesticides Industry participated in the Seminar.

After the welcome address by Mr James Fredrick, Trustee, Fredrick foundation who stressed on the importance of Chitin Inhibitors in the present context of Plant Protection, Mr Ishpahani addressed the gathering and informed that Duphar B V was the first to discover the Chitin Inhibitor "DIMILIN" in 1979. Dr Maas gave a detailed account of Dimilin and its success in the control of pests in agriculture, forestry, horticulture and public health. Dr Maas further stressed the importance of particle size of Dimilin in the control of pests.

The Seminar was conducted under the Chairmanship of Dr M Balasubramanian, Director of Research, Tamil Nadu Agricultural University, Coimbatore. Dr B V David, Director, Fredrick Institute of Plant Protection and Toxicology, Padappai explained in detail the work done with Dimilin at his Institute as well as in other parts of India on different pests. Dr M Balasubramanian, explained the Research work conducted with Dimilin (diflubenzuron) and BAY SIR8514 on cotton, castor, rice, coconut, brinjal and groundnut at Tamil Nadu Agricultural University, Coimbatore. He explained the good biological activity of the Chitin Inhibitors on eggs, larvae and pupae of different crop pests. Dr Balasubramanian further informed that the early instar larvae recorded more mortality. Combination of diflubenzuron with chloropyrifos had no significant additive effect.

Dr A H Shah, Professor of Entomology, Agricultural College, Gujarat Agricultural

University, Navasari gave an account of the work done with Dimilin on cotton against *Spodoptera litura*. Though 80–90% kill was obtained, he informed of the delayed action by Dimilin.

Dr O D Singh, Senior Scientist, Central Cotton Research Institute, Nagpur while explaining the work done with Dimilin on cotton said that Dimilin had little effect on tissue borers viz. bollworms but the effect on *Spodoptera litura* was good especially on eggs and first instar larvae. Dr M S Chari, Senior Entomologist, Gujarat Agricultural University, Anand explained the work done on tobacco against *Spodoptera litura* with diflubenzuron and triflumuron. He said that the Chitin Inhibitors proved very effective in preventing the development of *Spodoptera*.

Dr Abdul Kareem, Professor of Entomology, Agricultural College, Madurai outlined the work done with Dimilin on *Pericallia ricini* an important pest on castor. Dimilin can well be integrated in pest management.

Dr Azam, Principal & Head of the Department of Entomology, Agricultural College, Rajendranagar, Hyderabad informed that Dimilin had both ovicidal and larvicidal action and the field trails have given encouraging results and the results are similar to those obtained at other centres.

The Chairman in his concluding remarks observed the following;

- 1) the Chitin Inhibitors have an important role to play in pest management as the mode of action of Chitin Inhibitors is different from conventional pesticides. There is every possibility of including them in the spray schedule in plant protection.
- (2) Chitin Inhibitors are useful in the control of lepidopterous and colepterous pests that are more exposed outside.
- (3) Chitin Inhibitors have a major role to play in public health and veterinary fields.

The Seminar concluded after vote of thanks by Mr K K Unni, Director (Marketing), Coromandel Indag Products (P) Ltd., Madras.