



ENTOMOLOGICAL SOCIETY OF NEW ZEALAND INC

Fellow of the Entomological Society of New Zealand.

Nomination of Dr Alan Eyles

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SUMMARY OF RESEARCH

Dr Alan Eyles has published 70 papers on insects including one in Evolution (see Bibliography below). Alan's Monograph of *Dieuches* which describes, illustrates and keys 131 species, 71 of them new to science, has been described as a model revision. It pioneers the use of numerical taxonomy in entomology in New Zealand. Eyles' revision is the single most comprehensive work on the large and complex tribe Rhyparochromini (Schuh & Slater 1995: True bugs of the world), ranking among the nine most comprehensive taxonomic revisions in the whole of the Lygaeidae during the previous 30 years (Slater & O'Donnell 1995: Catalogue of the Lygaeidae of the world 1960-1994).

Alan's M.Agr.Sc. thesis was on the systematics, bionomics and distribution of *Nysius huttoni*. His Ph.D. thesis was a major advance on the seed-feeding habits of the Lygaeidae. Simultaneously, M. H. Sweet, working on his Ph.D. in the USA, also established that Lygaeidae (in the old sense) are seed-feeders by rearing many species on sunflower seeds. Alan, however, concentrated on the value of natural foods, and Alan's criteria of a good food included rearing both sexes from egg to fertile adults, duration of nymphal development, good fecundity of females, and adult longevity. Alan also hybridized two species of *Scolopostethus*. In backcrosses the female produced fertile eggs, but the eggs were not viable as the developing embryo failed to revolve to the opposite pole of the egg and died.

Prior to Alan's revision of *Rhypodes* six species of these endemic species had been described. Over an eleven year period and after numerous field trips (with Ian Townsend) to remote alpine areas, he collected and described 22 new species, redefining the limits of the genus. He reported that New Zealand has more species in the subfamily Orsillinae than any continent and is second only to the Hawaiian Islands in the proliferation of these species.

The genus *Chinamiris* Woodward was described on a single species. In his revision Alan described 29 new species, transferred another species into *Chinamiris*, and proposed a better description of the genus based on the wide range of characters displayed among the new species. *Chinamiris* contains more species than any other New Zealand mirid genus.

Prior to Alan's work on New Zealand Miridae there were 22 species in 17 genera. After revising all the New Zealand subfamilies (sometimes with co-authors) he has brought this total to 125 species and 43 genera. In the Phylinae 8 new genera and 14 new species were added. With Gorczyca he recorded the subfamily Cylapinae, and with Cassis the tribe Termataphlini, in New Zealand. Earlier, in 1971, he had recorded the homopteran family Membracidae in New Zealand: *Acanthucus trispinifer*, an introduction from Australia.

Some of Alan's research has generated further research by other scientists. For example Alan described *Stizocephalus brevirostris* from New Zealand. This helped G. G. E. Scudder solve a problem. He had a specimen from Barber's North American collection labelled "Victoria" thought to be from Vancouver Island, but it didn't belong in any known North American genus. As soon as Scudder saw Alan's published figures he recognised the similarity, realised that the specimen could have come from Victoria in Australia, so borrowed the type from New Zealand, plus specimens from Australian Museums. Result: Scudder published a paper recording *Stizocephalus brevirostris* from Australia and described six new species of *Stizocephalus* from Australia.

Alan's 1967 paper on New Zealand Targaremini generated further revisional research by Dr M. B. Malipatil on *Metagerra* in 1976, and New Zealand Targaremini in 1977. The latter paper (which was also partly generated by Woodward's earlier work on Targaremini) adds three new genera and six new species, and raises three of Woodward's subspecies to species while transferring them to different genera.

In 1964 Alan was seconded by the Niue Department of Agriculture to conduct a one-month survey of insects on Niue Island crops. In 1972 he was asked by Wildlife Service to do a quick survey of the insects in Takahe Valley in case there were not enough for new takahe chicks.

For the past 17 years Alan has run a free identification service usually working on insect surveys, including students as part of their theses, DOC, Plant & Food Research, the former MAF Quality Management, more recently MPI, and Landcare.

Given his contribution to New Zealand entomology over an extended period of time we have no doubt that Dr Alan Eyles should be considered for the honour of being elected as a Fellow of the Entomological Society of New Zealand.

Yours sincerely

Alan Flynn

Ricardo Palma

QUALIFICATIONS

B. Agr. Sc. 1957 (Massey); M.Agr.Sc. with First Class Hons in Entomology and Field Husbandry 1959 (Massey). [Eyles was the first post-graduate student in the new Zoology Department at Massey and gained the highest marks of Massey masterate theses (from all Departments) in 1958.]

Ph.D. 1962 (London); Diploma of Imperial College 1962;

Graduate of Christchurch College of Education 1974;

B.A. in Political Science and Public and Business Administration 1975 (Victoria);

Diploma in Teaching 1977 (NZ).

D.Sc. 1993 (Massey).

LIST OF SCHOLARSHIPS/AWARDS

1953-1956 War Bursary (Victoria Intermediate year, and Massey).

1957 Shell Scholarship (Massey).

1961 Henry George Plimmer Fellowship (Imperial College, London).

1961 British Council Foreign Exchange Grant for young research workers, for two weeks study at the University of Blindern, Oslo, Norway with Professor A. S. Johansson, noted for his work on the milkweed bug, *Oncopeltus fasciatus*.

1966 Sir Walter Mulholland Fellowship awarded by the New Zealand University Grants Committee on behalf of the New Zealand Meat Producer's Board, for an 18-month post-doctoral fellowship at the University of British Columbia, Vancouver, Canada. Here Alan worked on the large genus *Dieuches*.

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