

3. Other Upcoming Meetings

Joint meeting of the Entomological Society of Canada and the Acadian Entomological Societies at the Algonquin Hotel in St. Andrews, New Brunswick, between September 30th and October 4th. CONTACT Dr. G. Boiteau, Agriculture Canada, Box 20280, Fredricton, N.B., E3B 4Z7.

Biological Survey of Canada Conference on Aquatic Insects of Peatlands and Marshes on October 3, 1984 in conjunction with ESC meeting. CONTACT D.M. Rosenberg, Freshwater Institute, 501 University Crescent, Winnipeg, Manitoba, R3T 2N6.

Entomological Society of America Annual Meeting, December 9-13, 1984. San Antonio, TX. CONTACT ESA, 4603 Calvert Rd. College Park, MD. 20740.

Western Committee on Crop Pests (WCCP) at Regina, Saskatchewan, October 15th to 18th. CONTACT Lloyd Harris, Saskatchewan Agriculture, Regina.

4. News from the Agriculture Canada Research Station - Saskatoon - by C.E. Lynn

Wheat midge research is heading to the fields with John Doane, Owen Olfert, Bob Elliott, Mukul Mukerji, Neil Westcott, Ron Ford, Alf Arthur, and in the lab, Chris Hinks. Several summer students will accompany them. Funding is basically in place but a few details are to be tied up. If wheat midge diseases have to be looked at this summer, Al Ewen will be engaged in that project.

I came across Saskatchewan's first termite problem two winters ago. It was identified by the City of Toronto and the Biosystematics Research Institute as a pacific dampwood termite, *Zootermopsis angusticollis* (Hagen). Observation of the infestation has shown that it has not survived past the first mating flight. The infestation appears to have come into the house via a shipment of student's effects from Vancouver. The termites got into dampwood around a shower stall in the basement which the student used. The packing boxes had been stored next to the shower.

As well, John Doane reports the following:

An argasid tick (*Ornithodoros kelleyi* (Cooley & Kohls)), brought into the laboratory by Maurice Bahrey for identification was sent to Ottawa. According to Jack Martin of the Biosystematics Research Institute, this specimen is only the second Canadian record. The first was collected from the President's Residence, University of Saskatchewan, by Dr. Jack Rempel in 1965.

The present collection was made in early April from an older house in downtown Saskatoon known to have a bat problem.

During the winter I have also received two to three times as many bedbug calls from old apartments in downtown Saskatoon. Also ticks from birds have been submitted to the office, from a second floor in a two-storey house which I later found out had several roosting pigeons.

Pseudoscorpions and rove beetles appeared in several samples in March but they have stopped in April.

Alf Arthur will be conducting work on the sunflower moth this summer with summer student help from CSP Foods. CSP Foods is doing some agronomic work on sunflowers in order to reach growers with an effective management package 2 to 3 years down the road.

Of note, several replicated tests of soil-applied insecticides for wheat midge larvae have proven out in the lab on work conducted by Bob Elliott. He takes that work to the field to see if the results compare.

5. News from the Agriculture Canada Research Station - Regina - by D. Peschken

Peter Harris has been invited by the German Academy of Science and Literature, to give a talk at the "Symposium on Biological Plant and Health Protection" in Mainz, West Germany. The presentation is entitled "Biological Control of Weeds", and the event will take place Nov 15-17, 1984. We realize the above symposium title "Symposium on Biological....", does not sound quite right, but Peter insisted that is what it is called.

In July/August Mrs. Margaret Redfern will be at the Regina Research Station for one month to work on the western Canadian variety of the British Handbook "Insects and Thistles", which Mrs. Redfern authored. Murray Maw will co-author the Canadian variety.

6. News from the University of Regina - by P. Riegert

Dr. R.Y. ZACHARUK

The recent and current research involves the investigation of the ultrastructure of sense organs in insects from different habitats to elucidate the nature and form of their components and their differences related to habits and habitats. He recently completed a study on the antennae of larval *Tenebrio molitor* and is currently studying those on the antennae and labial palps of larval and adult dytiscids. Another prime interest is the transduction mechanism in chemosensilla, and is currently involved in an integrated ultrastructural biochemical, and electrophysiological study of this in the hairs that respond to female sex pheromones in male moths of the cabbage looper, *Trichoplusia ni*, and the European corn borer, *Heliothis zea*; in collaboration with biochemists and physiologists at the ARS/USDA Laboratory in Gainesville, Florida.

His graduate student, Miss Emily Leung, is involved in the above-mentioned study of dytiscids; specifically: The Ultrastructure of the Palpi of larval Dytiscidae; a Ph.D. thesis project.

Dr. W. CHAPCO

For the past eight years the basic genetics and population genetics of colour and electrophoretic traits in the migratory grasshopper, *Melanoplus sanguinipes* (F.) have been researched. So far the inheritance and linkage relations of about a dozen characters have been elucidated. The study continues. In addition, genetic, morphological, and behavioural differences among the three subspecies of *M. sanguinipes* (*sanguinipes*, *vulturinus*, *defectus*) are under investigation. Eventually the work will be extended to other species. The long range aims are to understand basic grasshopper biology (through genetics) and to provide a variety of alternative and in some cases, complementary methods (to traditional approaches) of population control.

Two graduate students are involved in grasshopper research. The first, Mr. Michael J. Bidochka, a Master's candidate, is working on "An eco-genetic study of grasshopper populations". The second, Mrs. Fay R. Hodson, is examining some behavioural, physiological, and morphological differences associated with genetically determined polymorphism in *Melanoplus sanguinipes*. She is also seeking a M.Sc.

Dr. P.W. RIEGERT

Since about 1975 his entomological research has shifted from a study of the insect to history of entomology. FROM ARSENIC TO DDT: A History of Entomology in Western Canada, was researched, and published in book form by the University of Toronto Press in 1980. Because this volume covered the history of entomology up to the Second World War, work is continuing on a second volume to bring the history up to date. About half of it has been written. In addition, four biographical sketches and three insect entries were written for the New Canadian Encyclopedia. A further review paper was prepared on Insects of the Great Plains to be published by the Canadian Plains Research Centre at the University of Regina.

7. News from the PFRA Tree Nursery at Indian Head - by G.B. Neill

The 1984 entomological studies at the Tree Nursery include work on sex-attractants for the spring cankerworm, cottonwood crown borer and carpenter-worm. Life history and control studies are also being conducted on the cottonwood leaf beetle and the willow gall sawfly. The Saskatchewan Dutch Elm Disease Survey is also headquartered out of the Nursery.

This year's summer student in the entomology unit is Joe Andrews, and a second year student from the University of Manitoba.

Peter Eckstein, a graduate student from the University of Manitoba, began a master's project at the Nursery this spring. Peter will be working on the life history of the ash plant bug.

8. Reports on new Saskatchewan Records - by Ron Hooper

On August 11, 1983 Keith Roney and Ronald Hooper collected a series of orange-colored skippers at Alfalfa in a ditch on the east side of the town of Val Marie. A tentative identification was given - Long Dash (*Polites mystic dacotah*-Edw.). They certainly had the long black dash going diagonally across the upper side of each fore-wing. It was noticed however that they were a richer color of buff on the underside rather than being more tawny.

Another problem was that the Long Dash flies in late June and early July and is not reported to be two brooded even in United States.

Some of the specimens were mounted up in May, 1984. Immediately it was that they were not Long Dashes. They differed on the upper-side by having the inner edge of the black marginal bands deeply incised with sharp orange points.

Further study proved them to be the Woodland Skipper (*Ochlodes sylvanoides napa* (Edwards)). They compare well with specimens from British Columbia in the J.B. Wallis Lepidoptera collection. This species was not recorded for Alberta by Bowman in "An Annotated List of the Lepidoptera of Alberta", (1951). It has