Annual Meeting

Wednesday, December 12, 2007
D0612

Occurrence and parasitism of *Sitodiplosis mosellana* (Diptera: Cecidomyiidae) in North Dakota

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The orange wheat blossom midge, *Sitodiplosis mosellana* (Géhin), is an economically important insect pest of wheat in the northern Great Plains. Annual county surveys were conducted in North Dakota for 12 years from 1995 to 2006, except for the southwest region. A systematic soil sampling method was used to collect overwintering wheat midge larvae from soil cores in the fall. Midge larvae were dissected to determine the parasitism rates. The wheat midge occurred in all counties sampled; however, densities fluctuated across years and locations depending on environmental conditions, wheat planting dates, percent parasitism and insecticide use. Incidence of parasitism averaged 60% of the surveyed sites. Parasitism rates averaged 22% and ranged from 0 to 100% over the twelve year period. Results from these annual surveys are used to generate 'midge risk maps' to alert wheat producers to potential problems with this pest.

Species 1: Diptera Cecidomyiidae *Sitodiplosis mosellana* (orange wheat blossom midge, wheat midge)

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