

Section 1. Mites and Sap-Sucking Insects

Category. Biology, Thresholds, Monitoring and Sampling

SURVEYING FOR *Diuraphis noxia* AND OTHER CEREAL APHIDS

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The Russian wheat aphid was first found in the suction trap at Parma in late June. Since then, they have been collected in traps at Parma, Caldwell, Mountain Home, Kimberly and Holbrook. Infestations have been confirmed in the following counties: Canyon, Payette, Gem, Washington, Power, Oneida, Bonneville and Bingham.

Most fields of volunteer grain in Canyon County were 0 (undetectable) to 2% infested in surveys conducted between 20-27 August. Those that had higher levels of infestation were near a known source. In a subsequent survey on 17 September, fields averaged 5% of plants infested.

Some Russian wheat aphid infestations in winter wheat have increased dramatically during the fall season this year. Two of the fields surveyed in the Treasure Valley were 8-9% infested the first week of November and 60-64% infested on the 19th of November. Russian wheat aphids in a field near Caldwell were observed to be active and reproducing on 17 December.

Early planted fields and fields near heavily infested volunteer grain had a higher percentage of plants with Russian wheat aphids than late planted or isolated fields. The heaviest infestations were found east of Idaho Falls, where fall grain was planted next to winter wheat seeded in the spring for erosion control. The cover crop never vernalized and thus became prime habitat for Russian wheat aphids during the later summer dry season. As the plants declined in the fall, the aphids moved into the newly emerged wheat. The problem was not detected until 60-80% of the plants were infested.

Numbers of grain aphids collected in suction traps were lower this year than in the past years, especially in eastern Idaho. Grain aphids comprised approximately 38% of the total collection this year as opposed to 70% and 64% in 1985 and 1986 respectively. In all three years, the 5 grain aphid species collected most frequently included *Schizaphis graminum*, *Rhopalosiphum padi*, *Metopolophium dirhodum*, *Rhopalosiphum maidis* and *Sitobion avenae*.