BIRD CHERRY-OAT APHID BIONOMICS IN THE PACIFIC NORTHWEST USA

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Farming practice changes have increased *R. padi* via the change from field corn to sweet corn as a large export crop to Asia. Also, warmer wetter conditions have allowed alate *R. padi* to migrate from corn and sorghum to wheat earlier - although they can invade up to killing frost which might be late December.

The Bird Cherry-Oat Aphid (*Rhopalosiphum padi*) is a major pest of wheat and barley in the Pacific Northwest (PNW) Region of the USA. The life cycle is complex. But to simplify the problem, one must look at the plant host guild.

Any seed treatment aphicide will work. Foliar sprays are less effective due to the timing of aircraft required to apply insecticides - which may be needed more than once. Current chemicals for protection against bird cherry-oat aphid (BCOA) and barley yellow dwarf virus (BYDV) that it vectors are registered seed treatment insecticides. Consult your local Extension Office for more information.

At the time of blossoming of the Bird Cherry (*Prunus padus*), alate females migrate to the Choke Cherry (*Prunus virginiana*), and other *Prunus* spp. Then back to corn and sorghum for the summer to late fall months. Corn is a plant host for BYDV so the reservoir of the virus increases.

The actual symptoms of BYDV appear in February as yellow striped leaves, often with purple canoe-shaped tips.

Alatae females vector Barley Yellow Dwarf Virus about 12 hours after feeding on the host. Subsequent apterous *R. padi* also do infield vectoring of BYVD to other plants in the field. The virus actually lives on the aphid salivary glands.