Section V.
Cereal Crop Pests

# AG ENT PEREGRINATIONS AT THE CENTRAL FERRY RESEARCH STATION, EASTERN WASHINGTON

S.L. Clement
USDA-ARS, Western Regional Plant Introduction Station
Washington State University
Pullman, Washington 99164-6402
509/335-3572
slclement@wsu.edu

The Central Ferry research station is a major site for regenerating seed of plant germplasm stored at the Western Regional Plant Introduction Station, Pullman, Washington. The station is 60 miles southwest of Pullman and is located along the Snake River in Garfield County. In a typical year, several hundred accessions are increased in nurseries at Central Ferry. It is imperative that these nurseries be protected from insects that might adversely affect plant health and seed production. The Russian wheat aphid (RWA) first appeared in Central Ferry nurseries in 1988, one year after it was first detected in eastern Washington. Entire grass nurseries were sprayed in 1988 and 1989 to control damaging RWA populations. The effect of research in 1990 and 1991 to identify RWA-susceptible grass taxa has been more targeted surveys and a more restrictive chemical control program. In 1988, the Central Ferry station was offered as a release site for exotic natural enemies of the RWA, with the result that Washington State University and APHIS entomologists released several thousand hymenopterous parasitoids at the site. In the last seven years, replicated field plots have been established to study: 1) the resistance of fungal endophyte-infected grasses to cereal aphids (S.L. Clement), 2) the resistance of spring wheat lines to RWA and Hessian fly (D.E. Bragg, N. Bosque-Perez, S.L. Clement), 3) the chemical control of cereal aphids and Hessian fly with new-generation insecticides (D.E. Bragg), 4) chemical control of canola insect pests (D.E. Bragg), and 5) the susceptibility of wheatgrasses to Hessian fly (S.L. Clement).