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1989 redistribution of insects attacking leafy spurge

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Abstract:

During 1989, the USDA-Animal, Plant, Health, Inspection Service, Plant Protection Quarantine, (APHIS-PPQ) Bozeman Bio-Control Facility expanded their year old release program to include six introduced biological control of weeds insects attacking the exotic rangeland weed leafy spurge, *Euphorbia esula* L. The purpose of this release effort was to establish domestic field insectary sites (FIS) for future collection and redistribution activities. All six agents had been previously screened, approved, and released by the USDA's Agricultural Research Service (ARS). One species, *Spurgia esulae*, was established in sufficient numbers for ARS to supply in limited numbers for APHIS domestic redistribution. Other species were collected from European and Canadian sources. Domestic pass-through quarantine screening for parasites and diseases was completed by APHIS personnel in quarantine facilities located in Texas and California prior to FIS releases.

During 1989, APHIS and state level cooperators established a total of thirty FIS in the states of Colorado (1), Idaho (2), Minnesota (2), Montana (10), Nebraska (2), North Dakota (6), Oregon (2), South Dakota (2), Washington (1), and Wyoming (2). For all states, the total number of individuals released was: *Aphthona cyparissiae* (root boring flea beetle) 1,228 adults; *A. czwalinae* (root boring flea beetle) 180 adults; *A. flava* (root boring flea beetle) 2,157 adults; *A. nigriscutis* (root boring flea beetle) 16,051 adults; *Spurgia esulae* (shoot-tip gall midge) 455 galls; and *Oberea erythrocephala* (stem and root boring longhorn beetle) 40 adults.

In 1990 FIS monitoring of 1989 release sites for population establishment and development will continue. During the 1990 field season an additional 50 FIS locations in 10 states will be initiated.