Reprinted with permission from: 1994 Leafy Spurge Symposium, Bozeman, MT. July 26-29, 1994. p. 6.

Sponsored by: Great Plains Agricultural Council, Montana Noxious Weed Trust Fund, and United States Department of Agriculture-Agricultural Research Service.

## Insect association on *Euphorbia characias* L. in Western Europe, a plant closely related to leafy spurge

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Euphorbia characias is a perennial weed wide distributed in all the European countries of the Mediterranean basin. The plant is perennial and its habitat is dry and rocky soil (generally limestone) from 0 to 1,000 m a.s.l. The plant is in the subgenus *Esula* the same subgenus of E. esula and E. virgata, the most common spurge weed species in USA. Insects associated to leafy spurge in Europe, and released in North America as Hyles euphorbiae, Oberea erythrocephala, Aphthona spp., also occurred on E. characias. The list of these promising candidate agents for biologial control of leafy spurge in the U.S. includes seven insect species. Within them, there are leaf feeders (the pyralid moth N. divisella and the tortricid moths Acoclita subseguana and Lobesia sp.), three stem borers (the scolitid beetle Tamnurgus euphorbiae, the agromyzid fly Opheomya sp., and the pyralid moth Nephopterix divisella), one gall midge (Spurgia sp. nr. esulae), and one agromyzid fly leaf miner (Liriomyza sp.). Some of these insects (N. divisella and T. euphorbiae) shows in preliminary host range tests the capability to complete their larval development on leafy spurge U.S. biotypes and are mentioned in the literature closely related to the family Euphorbiaceae, feeding on plants in the genus Euphorbia. At the present time, biology notes and host suitability tests are in progress at the USDA ARS European Biological Control Laboratory, Montpellier, France; at the USDA ARS EBCL Field Station, Rome Italy, at the ENEA CRE Casaccia, Rome, Italy; and at the Laboratorio di Acqualcoltura e Ecologia Animale of the II University of Rome.