

The Search for Effective Biological Control Agents in Europe. 2. Leafy and Cypress Spurge¹

D. Schroeder and A. Gassmann

European Station, IIBC, Delémont, Switzerland

The history of a 25-yr search in Europe for safe and effective biological control agents is discussed for leafy spurge and cypress spurge (*Euphorbia esula sensu lato* and *E. cyparissias*). Apart from unsolved taxonomic problems and genetic variability in the case of the target populations of leafy spurge in North America, work in Europe was handicapped by financial constraints and the fact that both target weeds are of scattered occurrence in the marginal areas of their native distribution surveyed. Well-developed complexes of specific natural enemies were not found at any individual site because of low plant densities in small isolated "island-populations." However, the field surveys were still productive. Information is given on 23 species of control agents, 7 of which have been established in North America. Special attention is paid to: 1.) problems caused by a variable target weed population with regard to the degree of agents' host-specificity and the demand that rare and endangered native spurges must remain unattacked; 2.) the range of habitat types colonised and habitat preferences of control agents; and 3.) the demand for disease-free introductions.

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