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European rust fungi pathogenic to collections of leafy spurge from the United States

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Twenty-one isolates of rust fungi (18 *Melampsora* spp., 3 *Uromyces* spp.) were collected in 1982 from five species of *Euphorbia* in Switzerland, Austria, Hungary, and Romania. Four of these isolates of *Melampsora* have been maintained under greenhouse conditions for several generations. One of these isolates caused infection of *E. esula-virgata* from Montana, Michigan, Minnesota, New Jersey, and Nevada. Another isolate infected both *E. esula-virgata* and *E. cyparissias* from Iowa, Maryland, Montana, and Nevada. Infection of several U.S. collections of leafy spurge by these European pathogens provides a basis for optimism that rust fungi may be used for biocontrol of this noxious weed. Rust inoculum is being increased for use in more detailed determinations of host range and environmental requirements needed for infection.