

# media release

*Colorado Department of Agriculture*

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## **FOR IMMEDIATE RELEASE**

December 12, 2013

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### ***Rust Fungus to Battle Widespread, Damaging Weed***

LAKEWOOD, Colo. – Canada thistle is one of Colorado’s most widespread and damaging exotic invasive weeds, infesting croplands as well as pastures, rangelands, roadsides and other non-crop areas. The United States Department of Agriculture (USDA) and the Colorado Department of Agriculture (CDA) have entered into a cooperative agreement to control the noxious weed Canada thistle using a rust fungus.

The four year agreement provides \$392,000 to the CDA’s Biological Pest Control Program to harvest and redistribute the rust fungus to uninfected patches of Canada thistle and monitor the decline of the weed following infection. If successful, the program is expected to help landowners and weed managers save millions of dollars by reducing weed infestations and cutting control costs.

The fungus, known as *Puccinia punctiformis*, only attacks Canada thistle and kills the plant by infecting the root system. Canada thistle has an extensive and long-lived root system which makes it resistant to most control methods. The weed can survive mowing, burning and often even chemical treatment, sending up new shoots from the still-living root system. The rust fungus is deadly to Canada thistle because it enters the root system, eventually killing the plant from below.

The rust is already found in Colorado but the natural spread of the rust is slow and sporadic which is why most Canada thistle patches don't already have the fungus. USDA Agricultural Research Service (ARS) scientists have done extensive work to better understand the rust life cycle. New knowledge gained from this work has enabled the development of methods for getting the fungus to more readily attack Canada thistle patches. Dr. Dana Berner, plant pathologist at the USDA ARS facility in Ft. Detrick, Maryland, has recently reported successful Canada thistle control at thirteen sites in the US and abroad. Dr. Berner has demonstrated that the fungus is a safe, effective and economical control option for Canada thistle.

The Colorado Department of Agriculture's Insectary, located in Palisade, will begin the Canada thistle biological control project in the spring of 2014. The project will consist of the discovery of naturally occurring fungal infections on Canada thistle plants in Colorado, harvest of teliospores (the infective stage of the rust), and distribution of the spores to uninfected Canada thistle patches.

"Timing is everything with the project. The initial survey of thistle patches for naturally occurring rust must happen in the spring when infected plants are visible, while teliospores only appear and can be harvested in the summer," said Dan Bean, CDA's Biological Pest Control Director. "Infection of rust-free Canada thistle patches using the teliospores is possible in the late summer and fall, when new and susceptible foliage begins to grow from the root system."

The infection and decline of Canada thistle patches will be closely monitored by the CDA. For more information please contact Dan Bean, Director, Biological Pest Control Program, [dan.bean@state.co.us](mailto:dan.bean@state.co.us), (970) 464-7916.

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*The Insectary, located in Palisade, CO, produces and releases about 30 different species of biological control agents. The Insectary is among only a handful of programs across the U.S. that provides farmers, ranchers and resource managers with dozens of species of beneficial insects and mites as tools to combat weeds and insect pests in an economical and environmentally sound way.*