Calgary's dandelions drive you nuts? Natural fungus offers promise as surefire killer

Agriculture and Agri-Food Canada scientist explores benefits of Phoma macrastoma

BY COLETTE DERWORIZ, CALGARY HERALD SEPTEMBER 19, 2012





A bee collects pollen in a field of dandelions in Hawkwood on May 20, 2012. The community was identified as one of the communities to be sprayed with a herbicide to control the weed.

Photograph by: Colleen De Neve, Calgary Herald

Calgary could soon have another weapon in its fight against dandelions after a Saskatchewan researcher discovered that a naturally occurring soil fungus causes the plant's death.

Karen Bailey, a research scientist with Agriculture and Agri-Food Canada in Saskatoon, has been exploring the fungus called Phoma macrastoma, which kills broadleaf weeds without having any effect on turf grass.

"It turns certain plants white and eventually kills them," said Bailey, who's been researching the fungus since 1995.

Studies show the fungus moves only eight centimetres deep and fewer than 30 centimetres across, making it safe for use in turf grass.

After a year, there's no trace of the fungus in treated soil so a variety of crops could be grown again.

The bio-pesticide, which means it's been made from naturally occurring products, has now been registered in Canada and could be on the market in granular form by 2014.

The product has practical uses for farmers, but it could also be used in cities such as Calgary to control dandelions and weeds such as Canada thistle.

"We're hopeful that this product comes on the market at a reasonable cost," said James Borrow, head of integrated pest management in the City of Calgary's parks department.

The city stopped spraying for cosmetic or beautification purposed in 1998, when its integrated pest management plan was approved by council. It only uses pesticides when weeds threaten the

long-term health of the landscape.

Each park is assessed regularly based on health and safety factors.

Soccer fields full of dandelions can be more slippery, so it's more likely they are treated. Weeds can also outgrow turf.

Borrow said they're always looking for improved products as they come available.

"We're already excited by the fact we'll have another tool in the tool box," he said.

Since the province removed dandelions from the list of noxious weeds, they've become a lower priority for treatment than they were in 2010. As a result, city bylaw officers can no longer ticket homeowners who allow dandelions to grow. Officers can hand out tickets if the weeds grow taller than 15 centimetres, the maximum height grass is allowed to grow in Calgary.

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