

InnoTech Alberta is a research and innovation organization, with a range of technologies available for licensing. Our focus is on the growth and development of technology-based sectors and the commercialization of technology in Alberta. We provide business and technical services, and initiatives that encourage a strong science, technology and entrepreneurial culture in Alberta.

LICENSING OPPORTUNITY

Chickweed Bioherbicide

LEVERAGE OUR TECHNOLOGY

InnoTech Alberta has a variety of technologies available for licensing. We will work with companies, from small to large, to set up mutually beneficial licensing deals. With more than 90 years in applied research and development, we are an experienced commercialization partner. InnoTech's licensing opportunities are the result of our world-renowned research programs. Contact us to explore these opportunities.

TECHNOLOGY OVERVIEW

InnoTech Alberta has isolated a novel strain of the bacteria, *Burkholderia andropogonis* (CW00B006C) that can infect chickweed (*Stellaria media*) and related species. *B. andropogonis* infection of the chickweed plants causes disease symptoms such as chlorosis (lack of chlorophyll) and necrosis (cell death), resulting in suppression of weed growth and eventually death.

ADVANTAGES

Effective:

- » Under field conditions, about 65% - 80% disease severity was consistently observed when an optimized concentration of *B. andropogonis* was applied to chickweed seedlings. A maximum dry weight reduction of 79.9% was obtained.

Easy delivery:

- » Bacterial isolate can be combined with an organosilicone surfactant to deliver the bacteria directly into the xylem of the weed plant



Chickweed (Stellaria media) treated with the InnoTech Alberta product (right) compared to control (left)

- » As opposed to some other bioherbicides, the bacteria do not require a prolonged dew period or free moisture for infection and colonization.

Non-pathogenic to crops and native flora:

- » Host specificity tests against 36 plant species in 30 genera and 8 families demonstrated that the use of *B. andropogonis* as a bioherbicide for control of chickweed would not cause major concerns to crops and native flora in Canada.

COMMERCIAL APPLICATIONS

Herbicide

STATUS

Issued patents in various jurisdictions, including US patent:

- » US Patent 7,141,407

This technology is available for licensing.

WANT TO EXPLORE THIS OPPORTUNITY?

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