BIOLOGICAL

STRATEGIES OF WEED MANAGEMENT

WHAT IS IT?

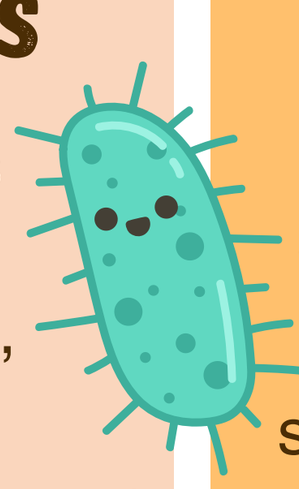
This method involves the use of living organisms, most often insects or pathogens, to control or suppress weeds

GRAZING ANIMALS

Introduce grazing animals that preferentially consume weeds. Important to note that not all weed seeds are destroyed by digestion, and some animals digest seeds better than others

BIOLOGICAL AGENTS

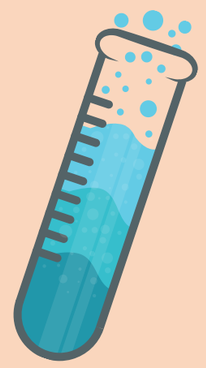
Introduce or enhance populations of natural enemies like predatory insects such as beetles or weevils, or pathogens that target specific weeds.



Biological control uses living organisms to control weeds so there are challenges to storing, transporting and applying/releasing the organisms while keeping them alive in an economical, practical manner.

ALLELOPATHY

Chemicals released by plants that affect the growth, development or germination of other nearby plants



SELECTIVITY CONUNDRUM

Is described as the challenge in achieving a balance between effectively controlling target weeds while minimizing the impact on non-target plants. This is a result of specificity. Although this is beneficial, this can also make this method harder to use as often more than one agent is needed to target all the different target weeds.

Biological controls are more commonly used in perennial environments like pastures and natural areas. Annual crops are high disturbance and a difficult environment for introduced insects and diseases to survive. In Canada our cold winters also pose a survival challenge

Contact Breanne Tidemann (breanne.tidemann@agr.gc.ca) for more information.

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