Invasive Species of the Okanagan-Similkameen

PUNCTUREVINE AND LONGSPINE SANDBUR Identification – Biology – Best Management Practices

These spiny invaders are rapidly spreading in the Okanagan and Similkameen Valleys, negatively impacting agricultural land. Both species prefer sandy or well-drained soils and readily invade disturbed ground. Stiff spines on the fruit readily attach to footwear, clothing, animals, tires, machinery and supplies.

PUNCTUREVINE

- Summer annual with a shallow taproot
- Green to reddish brown stems (0.3 1.5 m long)
- Normally forms dense mats but may grow upright where there is competition for light
- Leaves are 13 mm long, opposite and divided into 4-8 pairs of oval, 13 mm leaflets
- Yellow flowers appear from late spring or early summer until frost, opening in the mornings only

LONGSPINE SANDBUR

- Summer annual
- Stems (0.25-0.75 m) typically grow upright, but can branch and spread flat along the ground
- Leaf sheaths are flattened, very loose, and have a tuft of short hairs where they join the blade
- Leaves are light green
- Seeds are round and spiky (4-6 mm wide)





For more information about the Okanagan Similkameen Invasive Plant Program please visit our website at <u>www.oasiss.ca</u>. For further information on invasive species go to Okanagan Invasive Species Online <u>www.oiso.ca</u>

- Monitor your property regularly during the growing season to watch for these species
- Reduce the amount of bare ground/minimize soil disturbances
- Re-seed or plant disturbed soils
- Develop clear protocols for cleaning vehicles, machinery and footwear, such as check points or cleaning stations

Placement of bins, equipment and supplies is also an essential part of reducing the spread of puncturevine and sandbur. Puncturevine and sandbur seedpods can easily attach and be unknowingly transported from one location to another. Clearly mark locations for parking vehicles and machinery. Areas heavily infested with invasive plants should be considered "out of bounds" until measures are taken to remove or otherwise destroy the plants.

Long-term control of puncturevine and sandbur can be achieved by reducing the amount of seeds in the soil. Remove plants **before they produce seeds** and continue this practice for several years. Hand removal or hoeing is effective for controlling small outbreaks. Shallow tilling (~2.5 cm deep) of young plants can be effective in larger areas. Deeper tilling is not recommended since this practice may bury seeds which will continue to germinate for several years afterwards. Mowing is not an effective method of control. Mulch applied prior to germination or when plants are small can effectively suppress outbreaks of puncturevine but it needs to be at least 7-8 cm thick. Some hand removal may additionally be required.

Chemical control is also an option. Research conducted in the South Okanagan has indicated that pre-emergent herbicides including Chateau, Prism and Sandea provide season-long suppression of puncturevine. Refer to the label for crops these herbicides can be used on. Post-emergent herbicides including Clearview and Overdrive also showed control of puncturevine throughout the growing season, but can only be applied in non-cropland sites. For further information on the selection and application of chemicals to protect your crop, contact AgriService BC at 1-888-221-7141 or email AgriServiceB@gov.bc.ca

DELIVERED BY

FUNDING PROVIDED BY

2017 (Updated 2021)









