Integrated Weed Management

BRITISH COLUMBIA
BC Ministry of Agriculture and Food
Plant Industry Branch
Crop Protection Program

# Curled Dock – Hay and Pasture

Curled dock is a perennial, taprooted plant that produces an abundance of seed with a long dormancy period in the soil. It is not uncommon for plants to produce over 30,000 seeds which can remain viable in the soil for 2 to 4 years or more. It is a common weed of moist situations such as meadows, low pastures and hayfields, roadsides and streambanks and occasionally of drier upland sites. It is well distributed on acidic, wet soils in south coastal British Columbia as well as in some parts of the Interior.

**Curled Dock**

Livestock forced to eat curled dock can develop dermatitis and gastric disturbances.

Dock seedlings are not very competitive against healthy, rapidly growing pasture grasses, but once established, the root system is extensive and very difficult to control.

## Cultivation

Summerfallow or rotation to crops requiring annual cultivation may be required for severe infestations. This will lessen the problem if maintained for up to 5 years. Failure to be persistent in cultivation however can spread the plants through regeneration of both root pieces and seeds.

Sparse populations can be controlled by digging the plants at least 2 inches below the root crown.

### 1. Preplough

One or two weeks prior to ploughing in spring or fall, when established curled dock growth is in the full leaf stage but before flower spike develops apply:

✔ Roundup, Victor, Touchdown (glyphosate) @ 2.8 to 4.2 l/ha (1.1 to 1.7 l/acre). These products will kill or damage all vegetation contacted.

### 2. Summerfallow/Stubble

✔ Apply Banvel (dicamba) @ 2.5 l/ha (1 l/acre) when the dock is in early bud stage. Cultivate three weeks later. Check label for crops that can be seeded the following year.

Note: DO NOT use Banvel (dicamba) if legumes are to be seeded.

**Mature plant**

## 3. New Seeding

Seedling docks can be controlled with the following products provided treatment is applied within a few weeks of their germination. The herbicide chosen is dependant upon species seeded. Older plants that survive will not be controlled.

✔ Tropotox Plus (MCPB/MCPA) can be used on red, alsike and white clovers, and Embutox (2,4-DB) on white clover and alfalfa when the seedling legumes are in the 1 to 3 leaf stage. These treatments can also be used with seedling grasses and grass/legume mixes. When grasses alone are seeded (no legume present) 2,4-D or MCPA @ 0.5 to 0.8 kg/ha active ingredient can be used. DO NOT use 2,4-D or MCPA on the legumes.

## 4. Established Stands

No herbicide is recommended in established grass/legume mixtures. In a grass field or where removal of the legume can be tolerated, Banvel (dicamba) @ 2.75 l/ha (1.1 l/acre) or Banvel @ 1.6 l/ha (0.6 l/acre) plus 2,4-D Amine 500 @ 2.2 l/ha (0.9 l/acre) will provide good control. DO NOT graze or cut for hay for dairy cattle within 7 to14 days of treatment and DO NOT slaughter meat animals fed with treated forage, or grazed on treated areas, within 30 days of application.

For optimum control, prevent seed formation and encourage a healthy, competitive forage crop. DO NOT overgraze the pasture as this will encourage curled dock growth. Monitoring and maintenance herbicide treatment will be required for a number of years.

When using herbicides READ THE LABEL before applying.

**Wavy, crisp-margined leaves**

**Broadleaved Dock rosette**