



Capeweed and Erodium in pastures

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Capeweed and erodium (also known as corkscrew, long storksbill and geranium) are the two most common broadleaved weeds of dryland pastures in Victoria's 400 to 750 mm rainfall zone. Both are winter growing annuals which germinate after good late summer - autumn rains. Capeweed can be widespread throughout the zone. North of the dividing range erodium is most prevalent on the sandy soils developed on granite, and gravelly soils, while south of the divide it is generally restricted to gravelly rises and ridges.

Features of Capeweed and erodium

Capeweed and erodium have several features in common:

- As seedlings they are both very tolerant of dry conditions. This is a particular problem where an early autumn break is followed by weather which is dry enough to kill or severely set back the sub clover which has germinated. Once further rain falls the desirable pasture plants offer little competition to the surviving weeds.
- In early spring both plants flourish, flower and set seed. Once mature and dry the plants break up quickly, leaving virtually no feed or cover on the area over summer. This increases the risk of soil erosion.
- Both plants tend to colonise areas that are bare at the autumn break hence they are often found where hay has been cut, around stock camps and along ridges where stock prefer to graze and in paddocks that have been grazed heavily over summer.
- Both plants, because of their broad leaves, compete strongly with the seedlings in autumn pasture sowings.

Animal Health and Production

Erodium grows slowly over winter, providing little feed for stock. When the plant dies the seed heads split into a number of sharp spikes which twist into a spiral or corkscrew. When stock brush against the

plant, the corkscrew helps the seed work its way into the animals skin and wool, down grading their value. Seed that falls on the ground works its way into the soil in a similar manner, increasing its chance of survival and later establishment.

Capeweed, being mainly a weed of fertile situations, grows vigorously if weather conditions are favourable. During winter capeweed has a higher (90-95%) water content than other pasture plants (80-90%). This may restrict the amount of feed an animal grazing mainly capeweed can eat. Capeweed can cause nitrate or nitrite poisoning in sheep and cattle but this is rare. Milk from dairy cows may be tainted if they are grazing mainly capeweed.

Control

Pastures

The best way to deal with these two weeds is to establish a dense competitive pasture. North of the divide, for annual pastures in the mixed farming area, this means sowing early maturing cultivars of sub clover which have a high seed yield and a high hard seed content. The cultivars Daliak, Seaton Park and Trikkala currently best meet these requirements. These cultivars, in contrast to later maturing ones such as Mt. Barker and Woogenellup, are able to flower and set a lot of seed before the dry weather in spring starts. After the autumn break there is a dense germination of clover which generally competes successfully with capeweed and erodium. The high hard seed content ensures there will be plenty of seed to germinate if the first germination dies due to dry weather conditions. Even better control of these weeds is achieved if dense perennial based pastures are established. Lucerne, phalaris and cocksfoot are the most suitable perennial pasture plants.

South of the divide establishing and maintaining a dense highly productive persistent perennial pasture is the key to keeping capeweed and erodium in check.

Once established, rapid growth by the pastures is important if they are to compete successfully with weeds. Adequate annual fertiliser applications are critical. Phosphorus will be required in almost all situations and sulphur, potassium and trace elements may also be required. Controlling any pasture pest is also important. Pastures should be grazed so a dense balanced grass - clover pasture is maintained. Reorganising sub-divisional fencing may be required to achieve this over a whole paddock. Over grazing must be avoided, however by late summer - early autumn dry pasture from the previous spring should be grazed well down to encourage germination of sub clover after the autumn break.

Herbicides

A range of selective broadleaved herbicides are available that will kill capeweed and erodium in a

newly sown or old mixed pasture. In selecting a herbicide the aim should be to maximise the damage to the weeds and minimise the damage to the legumes in the pasture. Spraying is most effective if done when the weeds are young and actively growing. There is little point in spraying where there are very few or no pasture plants to take the place of the weeds.

The most common approach to controlling capeweed and erodium in old established pastures is to apply a sub lethal dose of a selective broadleaved herbicide followed by very heavy grazing. The technique, commonly known as spray grazing, is widely used with a high degree of success throughout Victoria. It is best used 6 - 8 weeks after the autumn break and once the legumes have at least three true leaves.

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