

Identification and Control of *Umbelliferous* Weeds in Cereals.

The *Umbelliferae* (also known as the *Apiaceae*) are a large family of mostly herbaceous, aromatic flowering plants with characteristic flowers arranged in an umbrella-shaped umbel. Agronomists have reported an increase in the incidence of *Umbelliferous* weeds in winter cereals.

Identification features of some *Umbelliferous* weeds:

Burr chervil (*Anthriscus caucalis*)

is a sparsely hairy, branched and spreading annual of lowland open habitats on well-drained, mainly sandy or gravelly soils. Stems are hollow, often curved below and purplish towards the base. Very finely cut dark green leaves, hairy beneath. The seeds are covered in beaked spines.

Cow parsley (*Anthriscus sylvestris*)

is a robust perennial plant, characteristic of hedgerows and roadsides, but can also occur in under-managed meadows, though is seldom found in arable fields. Large, fresh green leaves. Germination takes place between November and April. Flowers April – June.

Fool's parsley (*Aethusa cynapium*)

is a lowland annual of hedge banks, waste places, arable fields and other cultivated ground. The cotyledons are between three and eight times as long as broad. The first true leaves deeply divided. Leaves are hairless, dark green and concave, with slightly raised margins. Germinates in spring. Fool's parsley is poisonous.

Shepherd's needle (*Scandix pecten-veneris*)

is an annual plant of arable land, notably calcareous soils in eastern and southern England. It was once regarded as a serious agricultural problem, but populations have declined considerably as a result of herbicide use, and is now only found in a few locations, but is still occasionally seen in large numbers in East Anglia. Shepherd's needle has very long and narrow cotyledons, at least eight times as long as broad and a divided first true leaf. The distinctive seed pods are very long and thin, held in upright clusters, and give the plant its common name.

Spreading hedge parsley (*Torilis arvensis*)

is an annual, rarely biennial, herb, almost exclusively found on arable land in autumn-sown cereals, but sometimes in other arable crops; also on waste and disturbed ground. Spreading hedge parsley has long narrow cotyledons, the first leaves are trifid, with each segment deeply divided. The leaves are hairy. Flowers July – August.

Wild carrot (*Daucus carota*)

is a biennial weed of grass and arable land throughout the UK, especially common on chalky ground in the southeast. It is a short plant with a solid, often ridged stem and feathery leaves. The flowers are white, though the central flower of the umbel is sometimes purple. The cotyledons are between three and eight times as long as broad. The first true leaves deeply divided and hairy. The seeds are short and spiny. Seed dormancy is broken by a period of chilling.

Seedling Image Gallery



Cow parsley



Fool's parsley



Burr chervil



Shepherd's needle



Wild carrot

Control options

Based on limited trials data and field observations, listed below are indications of the levels of control that might be achieved of certain *Umbelliferous* species in cereals. Difficult umbelliferous species such as Burr Chervil are best controlled in the autumn when small. If left to the spring they can become large very quickly and outcompete the crop for water, nutrients and space.

	Fool's parsley	Burr chervil	Shepherd's needle	Wild carrot
Zypar 0.75 L/ha	MS up to 4 true leaves	MS up to 2 true leaves	MS up to 7 cm	MS up to 4 true leaves
Zypar 1.0 L/ha	S up to 4 true leaves	S up to 4 true leaves	S up to 10 cm	S up to 6 true leaves
Pixxaro 0.375 L/ha	S up to 2 true leaves	T	T	MS up to 4 true leaves
Pixxaro 0.5 L/ha	S up to 4 true leaves	T	T	S up to 4 true leaves
Broadway Star 265 g/ha	S up to 4 true leaves	S up to 8 true leaves	S up to 8 true leaves	S up to 8 true leaves

Information based on anecdotal or limited data, is only indicative and should not be considered as a recommendation for use on the part of Corteva Agriscience. The user assumes full responsibility for use on these weeds.