Annual poa (Poa annua)

Summary: Widespread grass weed – abundant in many pastures. Annual.

Identification: Up to 20 cm tall, it grows quickly and heads all year round. It has fine soft light green

leaves with tips that curve upwards.

Characteristics: Annual poa grows aggressively in bare areas

of pasture in autumn, winter and spring.

Typically it finishes seeding and dies in spring when it gets dry. Poa can be abundant in pastures, filling gaps even on

compacted ground. Is eaten by stock.



Barley grass (Critesion sp.)

Summary: Widespread, particularly in drier close grazed pastures. Annual.

Identification: Has dull green twisted leaves and seed heads that resemble barley.

Characteristics: Does not establish well in dense pasture. Its seed can penetrate the skin of sheep. Seeds are only viable for one to two years so preventing it from seeding can be an effective control method. Few barley grass plants appear following cultivation.



Summary: Creeping buttercup (*Ranunculus repens*) and giant buttercup (Ranunculus acris) are the most common. Grow best in wet areas. Perennials.

Identification: Creeping buttercup has runners and grows across the ground, whereas the giant buttercup is more upright. The giant buttercup also has finer more pointed leaves. Both produce vellow flowers.

Characteristics: Eaten by sheep but not cattle. Herbicide resistant. ecotypes of giant buttercup have developed.







Californian thistle (Cirsium arvense)

Summary: Widespread perennial.

Identification Starts growing in November as rosettes from a creeping root system. Leafy stems then develop that can grow 50-150 cm tall. Has small purple flowers that grow from round buds. Seedlings resemble Scotch thistle but grow more slowly and have smoother leaves carrying spines on the edge only. Characteristics: Typically grow in patches, often from a single plant via its roots.



Chickweed (Stellaria media)

Summary: Widespread winter grower that does not like dry conditions. Annual.

Identification A sprawling plant, which has small light green leaves. Produces small white flowers.

Characteristics: Germinates in the autumn and dies during the summer. Can be a problem in autumn saved pasture because of its ability to grow in shady conditions. Is controlled with frequent grazing through trampling.



Dandelion (Taraxacum officinale)

Summary: Widespread perennial.

Identification: Has a taproot and broad leaves with very jagged edges. Produces a bright yellow flower that has a thick hollow unbranched stem.

Characteristics: Its roots have a strong reproductive ability. Pieces of root from as deep as 20 cm can grow into new plants, giving it the capacity to multiply as a result of cultivation. Can thrive in cattle pasture but is kept in check under sheep grazing.





Dock (broad-leaved) (Rumex obtusifolius)

Summary: Widespread - most plentiful on wet soils. Perennial. **Identification:** Has large broad leaves and a taproot. Produces buds that turn a reddish colour.

Characteristics: Seeds are long-lived, so large banks of seed can build up in the soil. When dock infested paddocks are cultivated, they are soon reinfested, both from seedlings and regrowth of roots. Sheep eat docks, but cattle and horses avoid them.



Fathen (Chenopodium album)

Summary: Spring/summer weed in all districts. Annual. **Identification:** The leaves of many seedlings are purple underneath. The first two leaves are horizontal and narrow, but the true leaves are broad. Has an upright central stem. Its seeds ripen and fall while leaves are still green.

Characteristics: Germinates in spring and dies with frosts in autumn. Grows aggressively in dry conditions. Can grow densely in spring sown pasture. Seeds last for 60 years in the soil and can germinate with little rain. Stock can eat it without serious harm but may suffer scouring and ill-thrift.



Nettle (Urtica urens)

Summary: Common in the South Island and lower North Island. Annual.

Identification: Recognised by its dark green sharply toothed

leaves. When touched, causes stinging for a

few minutes from poison released by its fine bristles. Characteristics: Usually disappears from pasture but can return in patches where pasture is thin. Not eaten by stock.





Nightshade (black) (Solanum nigrum)

Summary: Widespread. Often confused with deadly nightshade. Annual.

Identification: Upright plant that can grow tall and leafy. The leaves and stem can develop a purple tinge, especially late in the season when stressed. It produces a small white flower and bunches of berries that are either green or black.

Characteristics: Germinates in the spring and dies with frosts in autumn. Often confused with deadly nightshade, which is much more poisonous and less common, mainly found around Christchurch.



Black nightshade is spread through birds consuming its fruit and spreading seed through their droppings.

Nodding thistle (Carduus nutans)

Summary: Common biennial – prefers a dry climate. Identification: Similar growth habit and size to Scotch thistle. Has red-purple flowers a bit larger than Scotch thistle, and they droop long before maturity.

Characteristics: Is more difficult to control than Scotch thistle. Three insects have been introduced for biological control, one by feeding on the seed in the flower head, one that forms galls and a third that attacks the rosettes. Herbicide-resistant ecotypes have developed in many parts of the country.



Scotch thistle (Cirsium vulgare)

Summary: Most widespread thistle. Biennial. **Identification:** Has a branched stout stem, which rises in October from a rosette grown the previous season. Plants are short and spindly on poor ground but grow to a height of 1 m in good conditions. Flowers are purple but bluer than nodding thistle.

Characteristics: Scotch thistles often grow after fire or soil disturbance. They can be abundant in pasture as stock, especially sheep, seldom eat them.





Shepherds purse (Capsella bursa-pastoris)

Summary: Common throughout NZ. Annual.

Identification: Its leaves are lobed but vary widely in shape

even among plants growing together. It

has a central stem (15-50 cm tall) carrying small white

flowers and buds that are heartshaped.

Characteristics: It is controlled in pasture by grazing and not letting it seed. The seed is viable for many years in the soil and plants appear in most crops/pasture sowings. It's tolerant of cold conditions and often grows through winter to set seed in spring.



Spurrey (Spergula arvensis)

Summary: Widespread annual.

Identification: Has very fine leaves and a sprawling stem. It produces small white flowers, which are gathered at the ends of the stems.

Characteristics: It mostly establishes in the autumn but can establish in spring. Even though it is a small\ weed it can cause problems by smothering

newly sown pastures. Seeds remain viable in the soil for many years and outbreaks can occur following cultivation. Spurrey grows well under acidic soil conditions.



Storksbill (Erodium cicutarium)

Summary: Common on the East Coast. Annual to biennial. Identification: Forms a rosette 10-30 cm in diameter with a deep taproot. Has long narrow pointed fruits.

Characteristics: Germinates in autumn and summer. In pasture, this weed provides reasonable feed in dry conditions but the fruits can penetrate the skin of sheep.



Wireweed (Polygonum aviculare)

Summary: Widespread annual.

Identification: Has a prostrate growth habit. Its stems are tough and branch up to 150 cm long. Small leaves are always green and seedlings have semi-erect leaves. It produces small flowers at the base of the leaves that are often hard to notice.

Characteristics: Closely related to willow weed. Establishes in spring, earlier than most summer annuals. Does not persist in a dense pasture sward. Needs good moisture for germination but is tolerant of low temperatures. Very tolerant of treading.



Broad Leaf Plantain (*Plantago major* Plantaginaceae)

Summary: Very common and found throughout New Zealand's pastures, lawns and waste areas. Perennial

Identification: Often confused with narrow leaf plantain despite having quite different leaf shapes. Seed head extends further down the stem than fruits on the narrow leaf plantains.

Characteristics: More often found in water logged and compacted soil types and low fertility conditions as well. Becomes yellow and sickly during the winter.



Cleavers (Galium aparine Rubiaceae)

Summary: Found throughout New Zealand common in cereal crops, brassica and new pasture. Annual

Identification: Normally found in the spring established crops a spreading weed with tiny "hooks" on its foliage that help it climb over surrounding plants and also help it stick to your socks.

Characteristics: In severe infestations cleavers are capable of pulling down crops and make harvest difficult. Is difficult to control and correct chemical selection to avoid poor control is essential.





Fumitory (Fumaria officinalis)

Summary: Found in many new cropping areas throughout all of New Zealand that is

established during the autumn and spring. Annual

Identification: Distinctive foliage not easily confused with any other weed. Weak stems with clusters of pink flowers. Often known as scrambling fumitory because of its weak stem once mature tends to creep along the ground.

Characteristics: While not a competitive weed fumitory is a problem as it is often difficult to control chemically and can smother desirable plants and cause lodging to arable crops.



Hemlock (Conium maculatum Apiaceae)

Summary: Poisonous to livestock and found throughout New Zealand. Hemlock is deemed a "Plant Pest" in many parts of New Zealand which mean land owners are legally obliged to control it. Biennial.

Identification: Fern like foliage with hairless stems often purple in colour, forms large rosette initially. In its second year hemlock can produce a metre long stem with white flowers.



Characteristics: If treated as a young plant hemlock can be easily controlled, however once it gets more mature control is difficult. While stock recognise hemlock as poisonous stock deaths will occur if allowed to graze especially mob stocking. Also once sprayed stock should be kept from the paddock until it has disappeared.

Hedge Mustard (Sisymbrium officinale Brassicaceae)

Summary: Normally grows during autumn and spring found in many areas of New Zealand a problem in many cropping, waste areas and in particular brassica crops. Annual

Identification: Starts off as a rosette that when matures will put up 1 metre stems that are very tough. At the early stages it is often confused with many other brassica type weeds. Produces small yellow flowers at the tips of its stems.

Characteristics: Hedge mustard is part of the brassica family and is easily controlled in most cropping situations except brassica. If not controlled its tough stem feature will make it a



concern as they will clog up machinery during harvesting and are not palatable to stock.



Penny royal (*Mentha pulegium* Lamiaceae)

Summary: Found in many pasture and lawn situation in the top of the North Island (Taupo up) often found in poor draining soil types, appears to be getting a bigger problem and is very invasive. Perennial

Identification: Easily identified by its strong smell when foliage is crushed between hands. Pennyroyal is a member of the mint family with creeping stems and purple to blue flowers. Milk tainting has been recorded as a problem with this weed.

Characteristics: Although most visible in the summer months control is better on actively growing plants during the spring or autumn. If planned right it can be easily controlled in pastures without damaging clovers.



Willow Weed (Persicaria maculosa, Polygonaceae)

Summary: Troublesome in most areas of New Zealand and particularly likes moist, wet conditions and is normally more of a problem in spring sown situations and dyes off during the autumn. Annual

Identification: As the name suggests it has a leaf shape similar to that of a willow leaf, with a distinctive brown mark down the middle of the leaf. Stems can be prostrate of scrambling with a red tinge to them. This reddish tinge often leads to it being commonly known as "Redshank", with small pink flowers.



Characteristics: There is a wide range of effective chemicals that can be used to control it in most situations.

Yarrow (Achillea millefolium Asteraceae)

Summary: Present in many waste, pastoral and cropping areas throughout New Zealand yarrow is normally only a problem in newly established crops , pastures and Lucerne . And is sometime seen as a useful pasture herb. Perennial

Identification: Yarrow is normally spreads via its rhizome system and to a lesser extend seed. Distinctive small fern like leaves that grow close to the ground. If not grazed will produce a medium height stem with many small white flowers. Has a distinctive smell as well.



Characteristics: Like most weeds that spread mainly from rhizomes yarrow is difficult to control However control of it is important in cropping areas and before establishing new



Lucerne paddocks. Chemicals used in the control of yarrow could be regarded as specialized ones and advise should be obtained before their use.

Speedwell (Veronica persica, Plantaginaceae)

Summary: Commonly known as scrambling speedwell found in many cropping and new pasture establishment throughout New Zealand. Part of a wide speedwell family each with their own features. Annual

Identification: As its name suggests it scrambles along the ground with its hairy foliage. Often difficult to tell the difference between it and other members of the speedwell family particularly field and to a less extent creeping speedwells.

Characteristics: Normally quite easy to control in most situations

however care in selection of chemicals is required as it is tolerant to a range of chemicals that are commonly used in cropping and pasture situations.

