Identification of seeds of undesirable weeds

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IDENTIFICATION OF SEEDS OF UNDESIRABLE WEEDS

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PREVENTING the introduction of weeds to a farm is a far cheaper proposition compared to the expensive and laborious process of eradicating a well established infestation.

Unfortunately most weeds establish themselves as plants before they are identified, the main reason being farmers are often unable to recognise weeds in the seed stage. Seeds are introduced on to farms in agricultural seed, attached to coats of animals or adhered to used farm machinery and vehicles.

The cost of weed control increases each year. In the United States of America it has been estimated losses from weeds are greater than the losses due to insect pests, plant and stock diseases combined. Californian farmers spend some 18 million dollars annually on herbicides alone. In Western Australia the annual cost of controlling weeds is in the region of 4.5 million dollars.

The purpose of this article is to assist farmers in identifying seeds they detect on their farm. With the aid of the illustrations identification will be possible in many cases. A magnifying glass will be a valuable aid in recognising many of the small seeds. If positive identification cannot be made the seeds should be sent to any of the Department of Agriculture's district offices.

BATHURST BURR (x3)
(Xanthium spinosum)
Brown spiny burr. Infestations in Eastern Goldfields and other States. Grows readily on flat areas or in crab holes after summer rains. Burrs commonly found in imported bird seed and adhering to wool packs and animal hides.

NOOGOORA BURR (x2)
(Xanthium pungens)
Straw to brown spiny burr. Large infestations in Queensland and New South Wales. More difficult to remove from wool than Bathurst Burr.

CALTROP (x3)
(Tribulus terrestris)
Mature burrs are straw brown. Widespread in cereal and sheep districts and the goldfields areas of Western Australia. Burrs adhere to rubber tyres and animals hooves. Burrs damage hooves and when ingested with food can lacerate the lining of the digestive tract.

MEXICAN POPPY (x10)
(Argemone mexicana)
Dark brown seed. Isolated infestations in agricultural areas and the goldfields. Grows freely along some rivers in the north-west of Western Australia. Seeds occasionally found in cereals, fodder and birdseed. Toxic alkaloids in plants and seeds are harmful to stock, especially poultry.

SPEAR THISTLE (x5)
(Cirsium vulgare)
Mottled ivory-grey seed. Weed favours higher rainfall areas of the south-west corner of Western Australia. Seeds commonly found in small crop seed and fodder. Plants tend to smother crops and pastures.

SAFFRON THISTLE (x2)
(Carthamus lanatus)
Grey-brown seed. Weed of cereal and sheep districts. Seeds commonly found in cereal grains and fodder. Plants compete with cereal crops and pastures.
PATERSON'S CURSE (x5)
(Echium spp.)
Dark grey-brown seed. Widespread in eastern Australia. In Western Australia infestations occur from Northampton to Esperance. Seeds commonly found in cereal grains, pasture seeds, and fodder. Plants compete with crops and pasture.

YELLOW BURR WEED (x10)
(Amsinckia spp.)
Yellowish-brown seed. Weed widespread in eastern Australia, but in Western Australia only infestations are around Northam and Merredin. Seeds commonly found in fodder and cereal grains from infested areas. Seeds toxic to stock except sheep.

WILD TURNIP (x10)
(Brassica tournefortii)

WILD RADISH (x2)
(Raphanus raphanistrum)
Light brown seed. Common weed in all agricultural areas. Seeds commonly found in crops and fodder. Plants reduce crop and pasture yields and taint milk.

DOUBLEGEE (x2)
(Emex australis)
Brown fruit. Seed orange to light brown. Common weed in agricultural and pastoral areas in Australia except Queensland. Spines of fruit adhere to rubber tyres and can be carried considerable distances. Seeds sometimes found in fodder and poorly graded pasture seed.

DOCKS (x10)
(Rumex spp.)
Brownish seed. Weed of agricultural areas. Seeds commonly found in clover seed, cereal grains, fodder, wool and hides. Plants compete with pastures and crops. Can be toxic to stock.

SORREL (x10)
(Rumex acetocella)
Red-brown seed. Seeds spread by stock and poorly graded pasture seeds. It is a perennial plant that competes with crops.

BARLEY GRASS (x5)
(Hordeum leporinum)
Straw-coloured seeds. Occurs throughout the agricultural and pastoral areas. Spread by stock, pasture seeds and fodder.

RIB GRASS (x10)
(Plantago lanceolata)
Dark brown to black seed. Occurs in pastoral and agricultural areas. Spread by lines of small crop and pasture seeds. Plants compete with pastures and crops.
TURNIP WEED (x5)
(Rapistrum rugosum)
Seed capsule straw-coloured. Seed brown. Occurs throughout the cereal and sheep districts. Seeds found in fodder and cereals. Plants compete with crops. Undesirable weed in dairying areas because it taints milk.

WILD MUSTARD (x10)
(Sisymbrium spp.)
Bright yellow seed. Seeds found in poorly graded pasture and crop seeds. Plants not palatable to stock.

CORN GROMWELL (x5)
(Lithospermum arvense)
Light brown seed. Weed of cropped areas. Plants compete with crops.

CORKSCREW (x5)
(Erodium spp.)
Grey-brown seed. Occurs on grazing areas. Seeds commonly found in wool, and ryegrass, cocksfoot and clover seeds. Sharp pointed seeds penetrate flesh of animals.

SMALL FLOWERED MALLOW (x10)
(Malva parviflora)
Grey-brown seeds. A perennial weed of pastured areas. Seeds commonly found in white and red clovers. Lambs grazing on infested areas can suffer from “staggers.” Seeds ingested by poultry cause “pink white” in stored eggs.

CATSEAR (x5)
(Hypochaeris spp.)
Dark brown seeds. Occurs in pastures. Seeds commonly found in cocksfoot, ryegrass and chewings fescue. In higher rainfall areas plants will compete with pastures.

FIELD MADDER (x10)
(Sherardia arvensis)
Greyish-blue seed. Seeds common in lines of red and white clovers, lucerne, cocksfoot and ryegrass. Three points at top usually removed in seed cleaning.

BINDWEED (x5)
(Convolvulus arvensis)

CHICKWEED (x10)
(Stellaria media)
Reddish-brown to chocolate-coloured seed. Weed of cropped and pastured areas. Smothers other plants.
CATCHFLY (x10)
(Silene gallica)
Black seed. Occurs in light land pastures. Seeds commonly found in white clover, and cereal grains. In high rainfall areas competes strongly with crops.

MOUSE-EARED CHICKWEED (x10)
(Cerastium glomeratum)
Reddish-brown to chocolate-coloured seed. Weed of cropped and pastured areas. Smothers other plants.

WILD PINK (x10)
(Kohlrauschia prolifera)
Grey-black seed. Weed favours high rainfall areas.

AMARANTHS (x10)
(Amaranthus spp.)
All species have a similarly shaped shiny black seed. In Western Australia two main species, one being a weed in the higher rainfall areas, the other in the wheat and sheep districts. Seeds commonly found in clovers, lucerne and fodder.

FATHEN (x10)
(Chenopodium album)
Black seeds often enclosed by straw-coloured seed coat. Seeds commonly found in wool, clovers and other crop and pasture seed. A summer growing plant which competes for nutrients and moisture.

WIRE WEED (x10)
(Polygonum aviculare)
Light to dark brown seeds. Weed of pastures and cropped areas. Seeds commonly found in clovers, turf seed and fodder. Plants suspected of causing dermatitis in sheep and horses. Seeds cause enteritis in animals.

GUILDFORD GRASS (x10)
(Romulea rosea)
Brown to black seeds. Widespread weed in agricultural areas. Seeds commonly found in clovers and turf seed.

SPEAR GRASS (x2)
(Bromus gussoniit)
Straw-coloured seed. Weed of crops and pastures. Seeds commonly found in fodder, cereals and wool. Seeds damage mouths of stock, often causing the formation of abscesses.

SILVER GRASS (x3)
(Vulpia spp.)
Straw-coloured seed. Weed in pastures and crops on light land. Seeds commonly found in ryegrass and fodder. Seeds are abnoxious because they penetrate animals' flesh.
WILD OATS (x3)  
(Avena fatua)  
Straw to dark brown seed. Widespread weed of agricultural and pastoral areas. Seeds commonly found in cereal grains and fodder. Plants are strong competitors with crops and pastures.

YORKSHIRE FOG (x5)  
(Holcus lanatus)  
Orange to straw-coloured seed. Weed of damp pastures and swamps. Seeds commonly found in fodder, cocksfoot and clovers.

PADDY MELON (x5)  
(Cucumis myriocarpus)  
Grey seed. Widespread weed in Western Australia. Plants compete with summer crops and can be toxic to stock if eaten in large quantities.

DRAKE OR DARNEL (x3)  
(Lolium temulentum)  
Straw-coloured seed. Isolated infestations in the wheat and sheep districts. Seeds often found in cereals. Seeds are toxic to stock.

CAPE WEED (x10)  
(Cryptostemma calendula)  
Dark brown seed. Pasture and crop weed. Smothers other plants. It also taints milk.