

INTRODUCTION

Poisonous plants represent one of the greatest hazards to livestock ranching on western rangelands. In addition to direct losses by death, there are those due to weight loss, poor reproductive performance, and poor health. Through scientific reports and practical experience, ranch managers have learned to recognize poisonous plants and keep livestock losses to a minimum. Some of the things that can be done to prevent problems with poisonous plants are

1. Know the poisonous plants. This is the first line of defense against toxic plants.
2. Practice good range management. To a limited degree, poisonous plants will always be present on rangelands, but the real danger is when the plants are eaten. Livestock poisoning is more often the result of poor range condition and poor management than the presence of poisonous plants. Most poisonous plants are unpalatable and will be eaten only if other good quality forage is not available.
3. Feed adequate mineral and vitamin A supplements. Livestock in poor health are more susceptible to many toxins than are healthy animals.
4. Provide adequate forage, especially during early spring or drought periods.
5. Avoid driving livestock through infested or poor condition range. Hungry animals lose their selectivity, and poor rangelands contain far more poisonous plants than those in good condition.

6. Use control measures—herbicides, grubbing, etc.—on heavy infestations of toxic plants.

The most common toxins in New Mexico poisonous plants are alkaloids, glycosides, minerals, nitrogenous compounds, oxalates and other organic acids, compounds causing photosensitivity, and resins or resinoids (see Tables 1 and 2).

Alkaloids. These are the most powerful poisons and produce strong physiological reactions, generally affecting the nervous system. The alkaloid is usually distributed throughout the plant and is active whether it is fresh or dry. There are no antidotes for alkaloid poisoning. Some of the common alkaloid-containing range plants are locoweeds (*Astragalus* spp.), larkspur (*Delphinium* spp.), groundsel (*Senecio* spp.), and lupine (*Lupinus* spp.).

Glycosides. Glycosides are compounds composed of a toxic agent combined with a sugar. The toxic agent is harmful when released from the glycosides. Cyanide (HCN, prussic acid) is the most common toxin in the glycosides. Glycoside levels in the plant are often related to environmental factors such as freezing, wilting, drought, and crushing. Cyanide is generally not retained in plant tissues after drying. Catclaw (*Acacia greggii*), chokecherry (*Prunus virginiana*), and johnsongrass (*Sorghum halepense*) are potential cyanide producers.

Minerals. Excessive absorption of certain minerals may be dangerous to livestock. Selenium is possibly the most important poisonous mineral in New Mexico. It may be found in some species of loco-

¹Professor, Department of Animal and Range Sciences, New Mexico State University, Las Cruces.

weed (*Astragalus* spp.), fourwing saltbush (*Atriplex canescens*), snakeweed (*Gutierrezia sarothrae*), and asters (*Aster* spp.). Prince's plume (*Stanleya pinnata*) grows only on seleniferous soils.

Nitrogenous compounds. Both range and crop plants may contain potentially toxic levels of nitrogenous compounds. Care must be taken during drought or after fertilizer or herbicide application. Nitrates are also toxic in dry material and silage. Nitrogenous compounds are often found in many species of the amaranth (*Amaranthaceae*), sunflower (*Asteraceae*), mustard (*Brassicaceae*), and goose-foot (*Chenopodiaceae*) families.

Oxalates and organic acids. Many plants contain oxalates, but few species in New Mexico contain enough to be considered dangerous. Halogeton (*Halogeton glomeratus*) and dock (*Rumex* spp.) possess soluble oxalates that are corrosive to animal tissue. Non-ruminants are more susceptible to oxalate poisoning than ruminants because the large rumen capacity enables the animal to detoxify small amounts of soluble oxalates. Most cases of ruminant poisoning occur on poor condition rangelands.

Compounds causing photosensitivity. On certain occasions, animals become hypersensitive to light. Photodynamic pigments contained in horsebrush (*Tetradymia* spp.), lechuguilla (*Agave lechuguilla*), sacahuista (*Nolina* spp.), and puncture-vine (*Tribulus terrestris*) react with light to produce swelling about the head, blistering, and a sunburned appearance. Damage may be so severe that the lips, ears, and eyelids may be lost. Bacterial infection may also set in.

Resins or resinoids. These are highly complex organic compounds that are present in a number of plants. Resins are found in milkweeds (*Asclepias* spp.), marijuana (*Cannabis sativa*), water hemlock (*Cicuta maculata*), and chinaberry tree (*Melia azedarach*).

Several noxious plants contain no poisonous compounds, and instead cause injury through me-

Table 1. Plant Toxins and Their Effects on Livestock

Toxin	Effect and Symptoms
Alkaloids	Nervous system, liver damage, locoism, trembling, abortion, depression, paralysis, vomiting, loss of coordination, coma, and death
Glycosides	Excitement, gasping, staggering, paralysis, prostration, convulsions, emphysema, blindness, coma, and death
Mineral poisoning	Birth defects, loss of appetite, depression, labored breathing, excessive urination, coma, and death through respiratory and myocardial failure
Nitrogenous compounds	Abortion, depression of lactation, discolored urine, vitamin A deficiency, brown blood, trembling, weakness, labored breathing, hemorrhages, coma, and death
Oxalates	Nervous system, reduced coagulability of blood, acute kidney inflammation, dullness, colic, depression, labored breathing, prostration, weakness, coma, and death
Compounds causing photosensitivity	Liver damage, inflammation of skin, itching, necrosis of skin, restlessness, leakage of serum through skin; death does not occur directly from the photodynamic action, but through kidney failure
Resins or resinoids	Direct irritation of the nervous and muscular tissue, depression, weakness, staggering, labored breathing, elevated temperature, dilation of pupils, degeneration of kidneys, coma, and death

chanical means if grazed. This is often by long awns or bristles (*Aristida* spp., *Hordeum jubatum*, *Stipa* spp.) or by stinging hairs (*Urtica* spp.).

POISONOUS PLANTS OF NEW MEXICO

There are at least 270 poisonous plants known to occur in New Mexico (Table 3). The following list includes all New Mexico range plants known to be poisonous or injurious to livestock or humans, even though many of these do not pose a threat except in exceptional circumstances. Also included are a few very common poisonous ornamentals or garden plants that may occasionally escape. The major poisonous plants that are likely to cause problems and should be watched for are marked with an asterisk (*). The list is arranged in alphabetical order by plant family and scientific name. Indications of toxins and animals affected are only those reported and verified. The plants may be toxic to animals other than those listed.

Table 2. Distribution of Toxins in the Major Plant Families in New Mexico

Family Toxin	Number of species in which toxin occurs in New Mexico	Family Toxin	Number of species in which toxin occurs in New Mexico	Family Toxin	Number of species in which toxin occurs in New Mexico
Fabaceae		Photosensitization	2	Brassicaceae	
Alkaloids	21	Unknown	2	Allylisothiocyanate	2
Dicoumarin	2	Solanaceae		Glycosides	1
Glycosides	3	Alkaloids	11	Mustard oil	1
Photosensitization	3	Glycosides	1	Selenium	1
Saponin	1	Unknown	2	Unknown	2
Selenium	13	Chenopodiaceae		Asclepiadaceae	
Unknown	10	Antihelminthic oil	1	Alkaloids	7
Asteraceae		Glycosides	1	Glycosides	7
Acrid substance	2	Nitrogenous compounds	3	Resinoids	7
Alcohol	1	Oxalates	4	Rosaceae	
Alkaloids	5	Photosensitization	1	Glycosides	7
Glycosides	3	Selenium	3	Euphorbiaceae	
Nitrogenous compounds	2	Ranunculaceae		Acrid substance	3
Photosensitization	2	Alkaloids	6	Croton oil	1
Saponin	2	Glycosides	4	Photosensitization	1
Selenium	11	Hairballs	1	Unknown	1
Unknown	21	Irritant oils	1	Liliaceae	
Volatile oils	2	Apiaceae		Alkaloids	4
Poaceae		Alcohol	2	Unknown	2
Fungus	1	Alkaloids	2	Polygonaceae	
Glycosides	3	Nitrogenous compounds	2	Nitrogenous compounds	1
Mechanically injurious	10	Unknown	2	Oxalates	4
Nitrogenous compounds	3			Photosensitization	1

Table 3. Number of Poisonous or Noxious Range Plants in New Mexico

Family	Number of species	Family	Number of species	Family	Number of species
Fabaceae	52	Ranunculaceae	12	Rosaceae	6
Asteraceae	50	Apiaceae	10	Polygonaceae	5
Poaceae	32	Brassicaceae	8	38 other families	66
Solanaceae	14	Asclepiadaceae	7		
Chenopodiaceae	12	Euphorbiaceae	7	Total	281

Agavaceae

Agave lechuguilla Torr.

Common name: lechuguilla

Toxin: unknown substances producing hepatogenic photosensitization; saponins

Habitat: dry hills and plains

Animals affected: sheep, goats

Nolina microcarpa Wats.

Common name: beargrass, sacahuista

Toxin: unknown

Habitat: dry, rocky hills and plains

Animals affected: cattle, sheep, goats

Nolina texana Wats.

Common name: beargrass, sacahuista

Toxin: unknown

Habitat: dry, rocky hills and plains

Animals affected: cattle, sheep, goats

Amaranthaceae

**Amaranthus palmeri* S. Wats.

Common name: pigweed, carelessnessweed, redroot amaranth

Toxin: nitrates

Habitat: gardens and old fields, waste areas

Animals affected: cattle, sheep, horses

**Amaranthus retroflexus* L.

Common name: pigweed, carelessnessweed, redroot amaranth

Toxin: nitrates

Habitat: gardens and old fields, waste places

Animals affected: cattle, sheep, horses

Anacardiaceae

**Toxicodendron radicans* (L.) Kuntze

Common name: poison ivy

Toxin: urushiol, a skin irritant

Habitat: moist areas at lower elevations, ravines

Animals affected: humans (dermatitis)

Apiaceae

Apium graveolens L.

Common name: celery

Toxin: nitrates (in the tops)

Habitat: waste ground

Animals affected: cattle

Berula erecta (Huds.) Cov.

Common name: water parsnip

Toxin: alkaloids

Habitat: waterways, wet habitats

Animals affected: cattle

**Cicuta maculata* L.

Common name: water hemlock

Toxin: cicutoxin (alcohol)

Habitat: streams and marshes

Animals affected: all animals and humans

Conium maculatum L.

Common name: poison hemlock

Toxin: alkaloids

Habitat: moist roadsides, ditches, edges of cultivated fields

Animals affected: all animals and humans

Daucus carota L.

Common name: wild carrot, Queen Ann's lace

Toxin: nitrates

Habitat: waste areas

Animals affected: horses, cattle

Pastinaca sativa L.

Common name: parsnip

Toxin: unknown

Habitat: disturbed ground, cultivated areas

Animals affected: humans

Sium suave Walt.

Common name: water parsnip

Toxin: unknown

Habitat: marshes and wet soils

Animals affected: cattle, swine

Apocynaceae

Apocynum androsaemifolium L.

Common name: spreading dogbane

Toxin: resins, glycosides

Habitat: open places, coarse soils along streams, meadows, and wooded hillsides

Animals affected: cats, dogs

Apocynum cannabinum L.

Common name: dogbane, hemp dogbane

Toxin: resins, glycosides

* Major poisonous plant

Apocynaceae (contd.) _____

Habitat: open places, coarse soils along streams
Animals affected: cats, dogs

Nerium oleander L.

Common name: oleander

Toxin: glycosides

Habitat: common ornamental

Animals affected: cattle, sheep, horses, humans

Asclepiadaceae _____

**Asclepias asperula* (Decne) Woodson

Common name: rough milkweed, spider antelopehorn

Toxin: resinoids, glycosides, alkaloids

Habitat: open dry plains, flats, desert swales, sandy or rocky hillsides with pinyon, juniper, or oak

Animals affected: sheep, cattle goats, horses, poultry

**Asclepias incarnata* L.

Common name: swamp milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: marshes

Animals affected: sheep, cattle, horses, poultry

**Asclepias latifolia* (Torr.) Raf.

Common name: broadleaf milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: dry plains in sandy soils

Animals affected: sheep, goats

**Asclepias pumila* Voil.

Common name: low whorled milkweed, plains whorled milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: plains, low hills

Animals affected: sheep, goats

**Asclepias speciosa* Torr.

Common name: showy milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: prairies, open areas

Animals affected: sheep, goats

**Asclepias subverticillata* Vail.

Common name: whorled milkweed, western whorled milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: dry plains and foothills, waterways, irrigation canals

Animals affected: sheep, goats

**Asclepias verticillata* L.

Common name: whorled milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: plains of northeastern New Mexico

Animals affected: sheep, cattle, horses

Asteraceae _____

Achillea millefolium L.

Common name: yarrow

Toxin: alkaloids and glycosides

Habitat: various

Animals affected: cattle, sheep, horses

Anthemis cotula L.

Common name: dog fennel, mayweed

Toxin: acrid substance irritating to mucous membranes

Habitat: disturbed soils, fields, waste places

Animals affected: poultry

Artemisia filifolia Torr.

Common name: sand sagebrush

Toxin: volatile oils

Habitat: sandy soils

Animals affected: horses

Artemisia spinescens (DC.) Eaton

Common name: bud sagebrush

Toxin: volatile oils

Habitat: dry plains, hills

Animals affected: cattle, sheep

Aster adscendens Lindl.

Common name: aster

Toxin: selenium

Habitat: mountain meadows

Animals affected: cattle, sheep

Aster coeruleus DC.

Common name: aster

Toxin: selenium

Habitat: wet ground, along streams

Animals affected: cattle, sheep

* Major poisonous plant

Asteraceae (contd.)

Aster commutatus Gray

Common name: aster

Toxin: selenium

Habitat: open fields, waste grounds

Animals affected: cattle, sheep

Aster ericoides L.

Common name: aster

Toxin: selenium

Habitat: meadows, open woods

Animals affected: cattle, sheep

Aster glaucoides Blake

Common name: gray aster

Toxin: selenium

Habitat: mountains

Animals affected: sheep

Aster laevis L.

Common name: smooth aster

Toxin: selenium

Habitat: scattered in dry to moist places

Animals affected: cattle, sheep

Aster occidentalis (Nutt.) Torr. & Gray

Common name: western aster

Toxin: selenium

Habitat: mountain meadows at moderate elevations

Animals affected: cattle, sheep

Aster pauciflorus Nutt.

Common name: fewheaded aster

Toxin: selenium

Habitat: widespread in saline soils

Animals affected: cattle, sheep

Baccharis pteronioides DC.

Common name: yerba-de-pasmo

Toxin: unknown

Habitat: dry, open hills

Animals affected: cattle, sheep

Bahia oppositifolia (Nutt.) DC.

Common name: bahia, plains bahia

Toxin: cyanogenetic glycoside

Habitat: dry soils of plains and hills

Animals affected: cattle, sheep

**Baileya multiradiata* Harv. & Gray

Common name: desert baileya, desert marigold

Toxin: unknown

Habitat: sandy and gravelly soils in dry areas

Animals affected: sheep, goats

Centaurea repens L.

Common name: Russian knapweed

Toxin: unknown

Habitat: fields, roadsides, waste places

Animals affected: horses

Centaurea solstitialis L.

Common name: yellow starthistle

Toxin: unknown

Habitat: waste grounds

Animals affected: horses

Chrysothamnus nauseosus (Pall.) Britton

Common name: rubber rabbitbrush

Toxin: unknown

Habitat: dry, open places at moderate and low elevations

Animals affected: cattle, sheep, horses

Conyza coulteri Gray

Common name: conyza

Toxin: unknown

Habitat: plains, valleys, alkaline soils

Animals affected: sheep

Flourensia cernua DC.

Common name: tarbush

Toxin: unknown

Habitat: dry plains, hills, mesas

Animals affected: sheep, goats

Grindelia squarrosa (Pursh) Dunal

Common name: curlycup gumweed

Toxin: selenium

Habitat: dry open places, prairies, plains, roadsides, fields

Animals affected: cattle, sheep, horses

**Gutierrezia microcephala* (DC.) Gray

Common name: broomweed, perennial snakeweed, turpentine weed, snakeweed, matchweed

Toxin: saponin

* Major poisonous plant

Asteraceae (contd.)

Habitat: dry plains, slopes, mesas

Animals affected: cattle, sheep, goats, swine, chicks, rabbits

**Gutierrezia sarothrae* (Pursh) Britt. & Rusby

Common name: broom snakeweed, snakeweed, matchbrush, turpentine weed

Toxin: saponin

Habitat: dry stony plains, slopes, mesas

Animals affected: cattle, sheep, goats, swine, chicks, rabbits

**Haplopappus tenuisectus* (Greene) Blake

Common name: burrowweed

Toxin: tremetol (alcohol)

Habitat: dry slopes and mesas

Animals affected: cattle, sheep

**Helenium autumnale* L.

Common name: sneezeweed, bitterweed

Toxin: unknown acrid substance

Habitat: moist low ground in lowlands and foothills

Animals affected: cattle, sheep

**Helenium hoopesii* Gray

Common name: sneezeweed, orange sneezeweed

Toxin: glycoside (dugaldin)

Habitat: high mountain slopes and valleys, often forming dense stands in moist, sunny, undisturbed localities

Animals affected: cattle, sheep

**Helenium microcephalum* DC.

Common name: sneezeweed

Toxin: unknown

Habitat: moist ground

Animals affected: cattle, sheep, horses, mules

**Hymenoxys odorata* DC.

Common name: bitterweed, bitter rubberweed

Toxin: unknown

Habitat: semiarid range

Animals affected: sheep

**Hymenoxys richardsonii* (Hook.) Cockerell

Common name: pingue, Colorado rubberweed, rubberweed

Toxin: unknown, may be associated with mineral imbalance

Habitat: dry, rocky, or clay soils of plains and mountain slopes

Animals affected: cattle, sheep, goats

**Isocoma wrightii* (Gray) Rydb.

Common name: rayless goldenrod, jimmyweed, burrowweed

Toxin: tremetol (alcohol)

Habitat: river valleys, drainage areas, irrigation canals

Animals affected: cattle, sheep, horses

Lactuca serriola L.

Common name: wild lettuce

Toxin: unknown

Habitat: waste grounds, valleys, stream banks

Animals affected: cattle

**Oxytenia acerosa* Nutt.

Common name: copperweed

Toxin: unknown

Habitat: alkaline soils in draws and streambeds, desert ranges

Animals affected: cattle, sheep

Psathyrotes annua (Nutt.) Gray

Common name: annual psathyrotes

Toxin: unknown

Habitat: dry, sandy, often alkaline soils, especially creekbeds, dry washes

Animals affected: sheep

**Psilostrophe sparsiflora* (Gray) A. Nels.

Common name: paperflower

Toxin: unknown, induces kidney damage

Habitat: dry, open range

Animals affected: sheep

**Psilostrophe tagetinae* (Nutt.) Greene

Common name: paperflower

Toxin: unknown, induces kidney damage

Habitat: dry, open range

Animals affected: sheep

Rudbeckia laciniata L.

Common name: golden glow, coneflower, thimble weed

* Major poisonous plant

Asteraceae (contd.) _____

Toxin: unknown

Habitat: moist, rich soils

Animals affected: swine, sheep

Rudbeckia hirta L.

Common name: black-eyed Susan

Toxin: unknown

Habitat: open slopes, meadows

Animals affected: cattle, swine

Sartwellia flaveriae Gray

Common name: sartwellia

Toxin: unknown

Habitat: alkaline soils, gypsum

Animals affected: cattle, sheep, goats

**Senecio flaccidus* Lessing

Common name: threadleaf groundsel

Toxin: pyrrolizidine alkaloids

Habitat: dry slopes, mesas, dry washes

Animals affected: cattle, sheep, horses, goats

**Senecio riddellii* Torr. & Gray

Common name: Riddell's groundsel

Toxin: pyrrolizidine alkaloids

Habitat: dry, sandy soils

Animals affected: cattle, sheep, horses, goats

Senecio spartioides Torr. & Gray

Common name: broom groundsel

Toxin: pyrrolizidine alkaloids

Habitat: valleys, plains, open areas, pine forests

Animals affected: cattle, sheep, horses, goats

Senecio vulgaris L.

Common name: common groundsel

Toxin: pyrrolizidine alkaloids

Habitat: gardens, disturbed ground

Animals affected: cattle, sheep, horses, goats

Sideranthus grindelioides (Nutt.) Rydb.

Common name: ironweed

Toxin: selenium

Habitat: dry plains, rocky hills

Animals affected: sheep

Tanacetum vulgare L.

Common name: common tansy

Toxin: ethereal oil; causes abortions

Habitat: roadsides, waste areas, ditchbanks, moist areas

Animals affected: cattle

**Tetradymia canescens* DC.

Common name: horsebrush

Toxin: photosensitizing compounds

Habitat: dry desert and sagebrush range

Animals affected: sheep

**Tetradymia spinosa* Torr. & Gray

Common name: spiny horsebrush

Toxin: photosensitizing compounds

Habitat: dry desert and sagebrush range

Animals affected: sheep

Viguiera annua (Jones) Blake

Common name: annual goldeneye

Toxin: unknown

Habitat: dry hills and mesas

Animals affected: cattle

**Xanthium spinosum* L.

Common name: spiny cocklebur

Toxin: hydroquinone

Habitat: waste places, fields

Animals affected: cattle, sheep, fowl, swine

**Xanthium strumarium* L.

Common name: cocklebur

Toxin: hydroquinone

Habitat: fields and waste places

Animals affected: cattle, sheep, horses, fowl, swine

Boraginaceae _____

Amsinckia intermedia Fisch & May

Common name: fiddleneck

Toxin: unknown

Habitat: dry, open, cultivated ground and waste areas

Animals affected: cattle, horses, swine

Cynoglossum officinale L.

Common name: hounds tongue

Toxin: unknown

Habitat: waste places in plains and hills

Animals affected: cattle

* Major poisonous plant

Brassicaceae

Barbarea vulgaris R. Br.

Common name: yellow rocket

Toxin: mustard oil

Habitat: wet meadows, waste places

Animals affected: horses

Brassica hirta Moench

Common name: white mustard

Toxin: cyanogenetic glycoside

Habitat: cultivated fields, waste areas

Animals affected: cattle, sheep

Brassica kaber Wheeler

Common name: charlock

Toxin: cyanogenetic glycoside

Habitat: grain fields, waste areas

Animals affected: cattle, sheep, swine

Brassica nigra Koch

Common name: black mustard

Toxin: goiterogenic glycoside

Habitat: cultivated fields

Animals affected: cattle

**Descurainia pinnata* (Walt.) Britt.

Common name: tansy mustard

Toxin: unknown

Habitat: sandy soils

Animals affected: cattle

Raphanus raphanistrum L.

Common name: wild radish

Toxin: unknown

Habitat: cultivated areas, waste places

Animals affected: cattle

Stanleya pinnata (Pursh) Britt.

Common name: prince's plume

Toxin: selenium

Habitat: desert areas, dry plains and mesas

Animals affected: cattle, sheep

Thlaspi arvense L.

Common name: field pennycress

Toxin: cyanogenetic glycoside

Habitat: cultivated fields, waste areas

Animals affected: cattle

Campanulaceae

Lobelia cardinalis L.

Common name: western cardinal flower

Toxin: alkaloids

Habitat: wet ground

Animals affected: cattle, sheep, goats

Cannabinaceae

Cannabis sativa L.

Common name: marijuana

Toxin: tetrahydrocannabinol

Habitat: waste places

Animals affected: cattle, sheep, horses, humans

Capparidaceae

Wislizenia refracta Engelm.

Common name: jackass clover

Toxin: unknown

Habitat: roadsides, fields

Animals affected: cattle

Caprifoliaceae

Sambucus mexicana Presl.

Common name: Mexican elder

Toxin: unknown

Habitat: valleys, stream banks, ornamental

Animals affected: cattle, swine

Sambucus microbotrys Rydb.

Common name: Rocky Mountain red elder

Toxin: unknown, concentrated in root

Habitat: moist woods, 8,000–12,000 feet

Animals affected: cattle, swine

Caryophyllaceae

Agrostemma githago L.

Common name: corn cockle

Toxin: cardiac glycoside

Habitat: cultivated fields, waste places

Animals affected: cattle, swine, poultry

**Drymaria pachyphylla* Woot. & Standl.

Common name: inkweed, drymary

Toxin: unknown

Habitat: alkaline clay soils

Animals affected: cattle, sheep

* Major poisonous plant

Caryophyllaceae (contd.) _____

Saponaria officinalis L.

Common name: bouncing bet, soapwort

Toxin: saponin

Habitat: waste areas, roadsides

Animals affected: sheep, rabbits

Saponaria vaccaria L.

Common name: cow cockle

Toxin: saponin

Habitat: waste areas, roadsides

Animals affected: sheep, rabbits

Chenopodiaceae _____

Atriplex canescens (Pursh) James

Common name: four-wing saltbush

Toxin: selenium

Habitat: dry plains, canyons

Animals affected: cattle, sheep

Atriplex nuttallii Wats. subsp. *cuneata* (A. Nels.)

Common name: Nuttall saltbush

Toxin: selenium

Habitat: dry hills and slopes

Animals affected: cattle, sheep

Atriplex rosea L.

Common name: red orache, red shadscale

Toxin: selenium

Habitat: waste areas

Animals affected: cattle, sheep

Bassia hyssopifolia (Pall.) Kuntze

Common name: bassia

Toxin: oxalates

Habitat: dry, saline areas

Animals affected: sheep

**Chenopodium album* L.

Common name: lambsquarter, goosefoot

Toxin: nitrates

Habitat: waste places

Animals affected: cattle, sheep, horses

Chenopodium ambrosioides L.

Common name: goosefoot

Toxin: antihelminthic oil

Habitat: waste places

Animals affected: geese

Chenopodium glaucum L.

Common name: oakleaf goosefoot

Toxin: nitrates

Habitat: waste places

Animals affected: cattle, sheep

**Halogeton glomeratus* (Bieg.) C.A. Mey.

Common name: halogeton, barilla

Toxin: oxalates

Habitat: dry saline plains and alkaline areas, roadsides

Animals affected: cattle, sheep

Kochia scoparia (L.) Schrad.

Common name: summer cypress, kochia

Toxin: photosensitizing compounds

Habitat: dry soils, roadsides, waste places

Animals affected: cattle, sheep, horses

Salsola tragus L.

Common name: Russian thistle, tumbleweed

Toxin: nitrates

Habitat: dry soils of plains and foothills

Animals affected: cattle, sheep, horses

**Sarcobatus vermiculatus* (Hook.) Torr.

Common name: greasewood

Toxin: oxalates

Habitat: alkaline flats or saline areas at low elevations

Animals affected: sheep, sometimes cattle

Suckleya suckleyana (Torr.) Rydb.

Common name: poison suckleya

Toxin: hydrocyanic acid

Habitat: moist ground, near ponds and reservoirs

Animals affected: cattle, sheep

Cyperaceae _____

Scirpus americanus Pers.

Common name: bulrush

Toxin: unknown, suspected of producing pulmonary emphysema

Habitat: wet or moist ground

Animals affected: sheep, sometimes cattle

* Major poisonous plant

Equisetaceae

**Equisetum arvense* L.

Common name: horsetail, scouring rush

Toxin: alkaloids

Habitat: sandy or gravelly soils along streams, moist fields, meadows

Animals affected: cattle, sheep, horses, goats

**Equisetum hiemale* L.

Common name: scouring rush, horsetail

Toxin: alkaloids

Habitat: low moist areas, mostly along streams

Animals affected: cattle, sheep, horses, goats

**Equisetum laevigatum* R. Br.

Common name: smooth horsetail

Toxin: thiaminase

Habitat: marshes, alluvial thickets, cultivated areas

Animals affected: cattle, sheep, horses, goats

Euphorbiaceae

Croton texensis (Klotz.) DC.

Common name: Texas croton

Toxin: croton oil (caustic)

Habitat: roadsides, fields, dry streambeds

Animals affected: cattle, sheep, horses

Euphorbia albomarginata Torr. & Gray

Common name: spurge

Toxin: unknown photosensitizing substance

Habitat: dry flats and slopes

Animals affected: cattle, sheep

Euphorbia esula L.

Common name: leafy spurge

Toxin: unknown acrid principle

Habitat: waste areas

Animals affected: sheep, horses

Euphorbia maculata L.

Common name: eyebane, spotted spurge

Toxin: unknown photosensitizing substance

Habitat: fields, slopes, canyons

Animals affected: sheep

Euphorbia marginata Pursh

Common name: snow-on-the-mountain

Toxin: unknown acrid principle

Habitat: plains, ornamental

Animals affected: cattle, humans

Euphorbia prostrata Alt.

Common name: euphorbia

Toxin: unknown acrid principle

Habitat: open plains and waste areas

Animals affected: cattle

Reverchonnia arenaria Gray

Common name: reverchonnia

Toxin: unknown

Habitat: dry, sandy ground

Animals affected: sheep

Fabaceae

**Acacia constricta* Benth.

Common name: whitethorn acacia

Toxin: cyanogenetic glycoside

Habitat: dry slopes and mesas

Animals affected: cattle

Acacia greggii Gray

Common name: catclaw acacia

Toxin: cyanogenetic glycoside

Habitat: along streams and washes; southern New Mexico

Animals affected: sheep

Astragalus albulus Woot. & Standl.

Common name: Cibola milkvetch

Toxin: selenium

Habitat: clay flats, low hills, sandstone soils

Animals affected: cattle, sheep, horses

Astragalus allochrous Gray var. *allochrous*

Common name: halfmoon locoweed

Toxin: swainsonine

Habitat: dry slopes, plains, and valleys

Animals affected: cattle, sheep, horses

**Astragalus allochrous* Gray var. *playanus* (M.E. Jones) Isely

Common name: Wooton locoweed

Toxin: alkaloid (locoine)

Habitat: plains, slopes, valleys

Animals affected: cattle, sheep, horses

* Major poisonous plant

Fabaceae (contd.)

**Astragalus bisulcatus* (Hook.) Gray var. *bisulcatus*

Common name: two-grooved milkvetch

Toxin: selenium

Habitat: plains and bottomlands, sagebrush zones

Animals affected: cattle, sheep, horses

**Astragalus bisulcatus* var. *haydenianus* (Gray) Barneby

Common name: two-grooved milkvetch

Toxin: selenium

Habitat: plains, dry slopes, sagebrush zone

Animals affected: cattle, sheep, horses

Astragalus canadensis L.

Common name: Canada milkvetch

Toxin: swainsonine

Habitat: moist ground or sometimes rocky slopes

Animals affected: cattle, sheep, horses

Astragalus confertiflorus Gray

Common name: yellow milkvetch

Toxin: selenium

Habitat: rocky slopes

Animals affected: cattle, sheep, horses

Astragalus drummondii Hook.

Common name: Drummond milkvetch

Toxin: swainsonine

Habitat: plains and hillsides, brush places

Animals affected: cattle, sheep, horses

Astragalus emoryanus (Rydb.) Cory

Common name: Emory milkvetch

Toxin: alkaloid, produces locoism when found on

limestone soils or red sandy soils

Habitat: rocky hillsides, canyons, disturbed areas

Animals affected: cattle, sheep, goats

Astragalus flavus Torr. & Gray

Common name: yellow milkvetch

Toxin: selenium

Habitat: rocky slopes, low hills

Animals affected: cattle, sheep, horses

**Astragalus lentiginosus* Hook var. *lentiginosus*

Common name: blue loco

Toxin: swainsonine

Habitat: rocky slopes, canyons, mesas

Animals affected: cattle, sheep, horses

**Astragalus lentiginosus* Hook. var. *diphysus* (Gray)

M.E. Jones

Common name: blue loco, rattleweed

Toxin: swainsonine

Habitat: rocky slopes, canyons, mesas

Animals affected: cattle, sheep, horses

**Astragalus mollissimus* Torr. var. *mollissimus*

Common name: woolly locoweed

Toxin: swainsonine

Habitat: open plains and valleys

Animals affected: cattle, sheep, horses

**Astragalus mollissimus* var. *earlei* (Rydb.) Tidestrom

Common name: woolly locoweed

Toxin: swainsonine

Habitat: dry slopes and plains

Animals affected: cattle, sheep, horses

**Astragalus nothoxys* Gray

Common name: beaked milkvetch

Toxin: swainsonine

Habitat: open slopes, sandy areas, among oak and juniper

Animals affected: cattle, sheep, horses

Astragalus oocalycis M.E. Jones

Common name: locoweed

Toxin: selenium

Habitat: dry hills, plains, valleys

Animals affected: cattle, sheep, horses

Astragalus pattersonii Gray

Common name: Patterson locoweed

Toxin: selenium

Habitat: dry plains and hillsides, in alkaline or seleniferous soils

Animals affected: cattle, sheep, horses

Astragalus pectinatus G. Don

Common name: tine-leaved milkvetch

Toxin: selenium

Habitat: variety of habitats

Animals affected: cattle, sheep, horses

**Astragalus praelongus* Sheld. var. *praelongus*

Common name: stinking milkvetch

Toxin: selenium

Habitat: variety of habitats

Animal affected: cattle, sheep, horses

* Major poisonous plant

Fabaceae (contd.)

**Astragalus praelongus* var. *ellisiae* (Rydb.) Barneby

Common name: Ellis milkvetch

Toxin: selenium

Habitat: variety of habitats, widespread

Animals affected: cattle, sheep, horses

Astragalus racemosus Pursh var. *racemosus*

Common name: alkali milkvetch

Toxin: selenium

Habitat: barren slopes, alluvial areas, alkaline soils

Animals affected: cattle

Astragalus racemosus var. *longisetus* M.E. Jones

Common name: alkali milkvetch

Toxin: selenium

Habitat: eroded slopes, along streams

Animals affected: cattle

Astragalus tephrodes Gray

Common name: silverline locoweed

Toxin: swainsonine

Habitat: rocky slopes to sandy plains

Animals affected: cattle, sheep, horses

**Astragalus thurberi* Gray

Common name: Thurber milkvetch

Toxin: alkaloid (locoine)

Habitat: plains, valleys, open slopes

Animals affected: cattle, sheep, horses

Cassia fasciculata Michx.

Common name: partridge-pea

Toxin: unknown

Habitat: dry fields and hillsides

Animals affected: cattle, sheep, horses

Crotalaria sagittalis L.

Common name: rattlebox, crotalaria

Toxin: unknown

Habitat: sandy soil near streams

Animals affected: horses

Lathyrus polymorphus Nuttall subsp. *incanus* (J.G.

Sm. & Rydb.) C.L. Hitchc.

Common name: wild pea

Toxin: alpha-, gamma-diaminobutyric acid

Habitat: dry plains, sandy banks, washes

Animals affected: horses

Lotus corniculatus L.

Common name: birdsfoot trefoil

Toxin: cyanogenetic glycoside

Habitat: sandy roadsides

Animals affected: cattle, sheep, horses

**Lupinus alpestris* A. Nels.

Common name: lupine, bluebonnet

Toxin: alkaloids

Habitat: mountains

Animals affected: cattle, sheep

**Lupinus argenteus*

Common name: silvery lupine

Toxin: alkaloids

Habitat: meadows, open woods

Animals affected: cattle, sheep, deer

**Lupinus caudatus* Kell.

Common name: Kellogg's spurred lupine, tailcut lupine

Toxin: alkaloids

Habitat: exposed hillsides

Animals affected: cattle

Medicago hispida Gaertn.

Common name: burclover

Toxin: photosensitization compounds

Habitat: waste areas

Animals affected: cattle, sheep, swine

Medicago sativa L.

Common name: alfalfa, lucerne

Toxin: saponin, photosensitization compounds

Habitat: cultivated and escaping

Animals affected: cattle, sheep, chicks, swine

Melilotus albus Desv.

Common name: white sweetclover

Toxin: dicoumarin

Habitat: waste areas, fields

Animals affected: cattle

* Major poisonous plant

Fabaceae (contd.)

**Melilotus officinalis* Lam.

Common name: yellow sweetclover

Toxin: dicoumarin

Habitat: waste areas, fields

Animals affected: cattle, sheep, horses

**Oxytropis lambertii* Pursh

Common name: Lambert's crazyweed

Toxin: unknown alkaloid, produces locoism

Habitat: plains, mountain slopes

Animals affected: cattle, sheep, horses

**Oxytropis sericea* Torr. & Gray

Common name: white loco, silky crazyweed

Toxin: alkaloids, produces locoism

Habitat: open slopes, widespread

Animals affected: cattle, sheep, horses

Pisum sativum L.

Common name: garden pea

Toxin: unknown

Habitat: gardens

Animals affected: cattle, sheep

Caesalpinia gilliesii (Wallich ex Hooker) Wallich ex D. Dietrich

Common name: bird of paradise

Toxin: unknown, green seed pods are gastrointestinal irritants

Habitat: around dwelling sites, waste areas

Animals affected: cattle

Prosopis glandulosa Torr.

Common name: mesquite

Toxin: unknown, may cause a nutritional deficiency

Habitat: plains, prairies, river valleys

Animals affected: cattle

Psoralea argophylla Pursh

Common name: scurf pea

Toxin: unknown

Habitat: plains and hills

Animals affected: cattle, sheep

Psoralea tenuiflora Pursh

Common name: scurf pea, Indian turnip

Toxin: unknown

Habitat: dry plains, low hills

Animals affected: cattle, horses

Robinia pseudoacacia L.

Common name: black locust

Toxin: unknown

Habitat: along roadsides, escaped from cultivation

Animals affected: cattle, sheep, horses, poultry

Sophora secundiflora (Ort.) Lag.

Common name: mescal bean, frijolito

Toxin: alkaloids

Habitat: along limestone bluffs, gravelly outwashes

Animals affected: cattle, sheep, goats

Sophora sericea Nutt.

Common name: silky sophora

Toxin: alkaloids

Habitat: dry fields and plains

Animals affected: horses

Thermopsis montana Nutt.

Common name: mountain golden pea

Toxin: alkaloids

Habitat: mountain valleys and clearings

Animals affected: cattle

Thermopsis rhombifolia Rich.

Common name: prairie thermopsis

Toxin: alkaloids

Habitat: dry, sandy soils of hills and plains

Animals affected: cattle, horses

Trifolium hybridum L.

Common name: alsike clover

Toxin: photosensitizing compound

Habitat: meadows, waste areas

Animals affected: cattle, sheep, horses, swine

Trifolium pratense L.

Common name: red clover

Toxin: unknown

Habitat: fields and waste areas

Animals affected: cattle, sheep, horses

Trifolium repens L.

Common name: white clover

Toxin: cyanogenetic glycoside

* Major poisonous plant

Fabaceae (contd.)

Habitat: fields and waste areas
Animals affected: newborn pigs

Vicia villosa Roth

Common name: hairy vetch, wintervetch
Toxin: photosensitizing compound
Habitat: cultivated areas
Animals affected: cattle, horses

Fagaceae

**Quercus gambelii* Nutt.

Common name: Gambel oak
Toxin: tannins
Habitat: canyons and mountain slopes
Animals affected: cattle, sheep, goats

**Quercus havardii* Rydb.

Common name: Havard shinoak, shinnery
Toxin: tannins
Habitat: sandy plains
Animals affected: cattle, sheep

Fumariaceae

**Corydalis aurea* Willd.

Common name: golden corydalis
Toxin: alkaloids
Habitat: damp slopes and plains
Animals affected: cattle, sheep

Gentianaceae

Centaurium calycosum Fern.

Common name: mountain pink
Toxin: unknown
Habitat: boggy or marshy places
Animals affected: sheep, goats

Hypericaceae

Hypericum formosum H.B.K.

Common name: southwestern St. John's wort
Toxin: photosensitizing compounds
Habitat: moist soil in damp meadows
Animals affected: cattle, sheep, horses, goats

Iridaceae

Iris missouriensis Nutt.

Common name: Rocky Mountain iris
Toxin: unknown
Habitat: open meadows in the higher mountains
Animals affected: calves

* Major poisonous plant

Juncaginaceae

**Triglochin maritima* L.

Common name: arrowgrass
Toxin: hydrocyanic acid
Habitat: marshy ground
Animals affected: cattle, sheep

**Triglochin palustris* L.

Common name: arrowgrass
Toxin: hydrocyanic acid
Habitat: marshy ground
Animals affected: cattle, sheep

Lamiaceae

Lamium amplexicaule L.

Common name: henbit, dead nettle
Toxin: unknown
Habitat: waste areas
Animals affected: cattle, sheep, horses

Salvia reflexa Hornem.

Common name: annual sage, mintweed
Toxin: nitrates
Habitat: rocky slopes, open woods
Animals affected: cattle

Liliaceae

Asparagus officinalis L.

Common name: asparagus
Toxin: unknown compound in fruits
Habitat: valleys, roadsides, loose or sandy soils
Animals affected: cattle and dairy cattle

**Veratrum californicum* Durand

Common name: false hellebore, cornlily
Toxin: alkaloids
Habitat: moist meadows in the mountains
Animals affected: cattle, sheep, fowl

**Zigadenus venenosus* Pursh

Common name: death camas
Toxin: alkaloids
Habitat: wooded slopes in the mountains
Animals affected: cattle, horses, swine, fowl

**Zigadenus gramineus* Rydb.

Common name: death camas
Toxin: alkaloids
Habitat: wooded slopes and open ground
Animals affected: cattle, sheep, horses

Liliaceae (contd.)

**Zigadenus paniculatus* (Nutt.) Wats

Common name: death camas

Toxin: alkaloids

Habitat: open grassy or rocky plains and hills

Animals affected: cattle, horses, swine

Linaceae

Linum neomexicanum Greene

Common name: New Mexico yellow flax

Toxin: saponin, glycoside

Habitat: wooded mountain slopes

Animals affected: cattle

Linum usitatissimum L.

Common name: flax

Toxin: cyanogenetic glycoside

Habitat: waste areas around cultivated areas

Animals affected: cattle

Loranthaceae

Phoradendron flavescens (Pursh) Nutt.

Common name: mistletoe

Toxin: pressor amines, phenylethylamine, tyramine

Habitat: parasitic on cottonwood and other deciduous trees

Animals affected: cattle

Malvaceae

Gossypium barbadense L.

Common name: sea-island cotton

Toxin: gossypol in seeds

Habitat: cultivated

Animals affected: cattle, sheep, horses

Malva parviflora L.

Common name: mallow, cheeseweed

Toxin: fatty acids (malvalic and sterculic)

Habitat: waste areas

Animals affected: cattle, sheep, horses

Meliaceae

Melia azedarach L.

Common name: chinaberry tree

Toxin: resins, especially in fruits

Habitat: waste areas, ornamental

Animals affected: cattle, sheep, horses

Moraceae

Maclura pomifera Schneid

Common name: Osage orange

Toxins: unknown compounds in fruit

Habitat: waste areas and arroyos

Animals affected: cattle, sheep, horses

Oxalidaceae

Oxalis corniculata L.

Common name: creeping woodsorrel

Toxin: oxalates

Habitat: moist waste areas, often in lawns

Animals affected: sheep

Papaveraceae

Argemone mexicana L.

Common name: Mexican poppy

Toxin: alkaloids

Habitat: waste areas

Animals affected: cattle, sheep, horses, fowl

Argemone polyanthemus (Fedde) G. Ownbey

Common name: prickly poppy

Toxin: alkaloids

Habitat: dry plains, waste areas

Animals affected: cattle, sheep, horses, fowl

Papaver nudicaule L. var. *radicatum* (Rottb.) DC.

Common name: Iceland poppy

Toxin: alkaloids

Habitat: open slopes and summits

Animals affected: cattle, sheep, horses

Papaver somniferum L.

Common name: common poppy

Toxin: alkaloids

Habitat: ornamental

Animals affected: cattle, sheep, horses

Pinaceae

Pinus ponderosa Laws.

Common name: Western yellow pine, ponderosa pine

Toxin: unknown compounds in leaves

Habitat: mountain areas

Animals affected: cattle

* Major poisonous plant

Poaceae

Agropyron cristatum (L.) Gaertn.

Common name: wheatgrass

Toxin: ergot infestation of seedheads

Habitat: rangeland and pastures

Animals affected: cattle, sheep, horses, humans

Aristida spp.

Common name: red three-awn

Toxin: awns are mechanically injurious

Habitat: plains and rocky slopes

Animals affected: cattle, sheep, horses

Avena fatua L.

Common name: wild oats

Toxin: nitrates

Habitat: cultivated land and waste areas

Animals affected: cattle, sheep, horses

Avena sativa L.

Common name: cultivated oats

Toxin: nitrates, photosensitizing compounds, grass tetany

Habitat: open ground, grasslands, waste areas

Animals affected: cattle, sheep, horses

Bouteloua spp.

Common name: grama grasses

Toxin: low levels of cyanide

Habitat: plains

Animals affected: cattle

Bromus diandrus Roth

Common name: ripgut brome

Toxin: mechanical injury from mature awns

Habitat: weedy ground

Animals affected: cattle, sheep

Bromus inermis Leyss.

Common name: smooth brome

Toxin: ergot infestation of seed heads

Habitat: mountain slopes and meadows

Animals affected: cattle, sheep, horses

Bromus rubens L.

Common name: foxtail chess, red brome

Toxin: mechanical injury from mature awns

Habitat: dry hills and waste areas

Animals affected: cattle, sheep

Bromus tectorum L.

Common name: cheatgrass, down cheat

Toxin: mechanical injury from mature awns; may also cause ergot poisoning

Habitat: roadsides and waste areas

Animals affected: cattle

Cynodon dactylon (L.) Pers.

Common name: Bermudagrass

Toxin: photosensitizing compound, hayfever

Habitat: waste areas; widespread

Animals affected: cattle

Elymus spp.

Common name: wild rye

Toxin: ergot infestation

Habitat: mountain slopes, plains

Animals affected: cattle

Eragrostis cilianensis (All.) Lutati ex Janchen

Common name: lovegrass, stinkgrass

Toxin: unknown

Habitat: cultivated or waste areas

Animals affected: horses

Festuca arundinacea Schreber

Common name: tall fescue

Toxin: alkaloids, fescue foot

Habitat: pastures

Animals affected: cattle

Glyceria striata (Lam.) Hitchc.

Common name: fowl mannagrass

Toxin: cyanogenetic compounds

Habitat: plains and foothills

Animals affected: cattle, sheep, horses

Hilaria jamesii (Torr.) Benth.

Common name: galleta

Toxin: ergot infestation of seedheads

Habitat: plains and foothills

Animals affected: cattle, sheep, horses

Hilaria mutica (Buckl.) Benth.

Common name: tobosa

Toxin: ergot infestation of seedheads

Habitat: plains and foothills

Animals affected: cattle, sheep, horses

* Major poisonous plant

Poaceae (contd.)

Hordeum jubatum L.

Common name: foxtail barley
Toxin: mechanical injury from mature awns
Habitat: plains and open slopes
Animals affected: cattle, sheep, horses

Hordeum vulgare L.

Common name: barley
Toxin: mechanical injury from mature awns
Habitat: waste areas
Animals affected: cattle, swine, dogs, poultry

Lolium perenne L.

Common name: perennial ryegrass
Toxin: ergot infestation of seed heads
Habitat: meadows, waste areas
Animals affected: cattle

Panicum antidotale Retz.

Common name: blue panicum
Toxin: nitrates
Habitat: rangelands
Animals affected: cattle

Panicum capillare L.

Common name: witchgrass
Toxin: nitrates
Habitat: roadsides, waste places
Animals affected: cattle

Panicum coloratum L.

Common name: Kleinegrass
Toxin: photosensitivity
Habitat: pastures
Animals affected: sheep

Paspalum dilatatum Poir.

Common name: dallisgrass
Toxin: ergot infestation of seed heads
Habitat: irrigated pastures, moist disturbed areas
Animals affected: cattle, sheep, horses

Poa pratensis L.

Common name: Kentucky bluegrass
Toxin: ergot infestation of seed heads
Habitat: lawns, pastures, meadows
Animals affected: cattle, sheep, horses

Secale cereale L.

Common name: rye
Toxin: ergot infestation of seed heads
Habitat: cultivated
Animals affected: cattle, sheep, horses, humans

Setaria lutescens (Wiegel) Hubb.

Common name: yellow bristlegrass
Toxin: mechanically injurious (rare)
Habitat: waste areas
Animals affected: cattle

Sorghum bicolor (L.) Moench

Common name: common sorghum, milo
Toxin: cyanide
Habitat: waste areas, cultivated
Animals affected: cattle, sheep, horses

**Sorghum halepense* (L.) Pers.

Common name: Johnsongrass
Toxin: cyanide
Habitat: waste areas, cultivated fields
Animals affected: cattle, sheep, horses

Stipa comata Trin. Rupr.

Common name: needle-and-thread
Toxin: mechanical injury from mature awns
Habitat: open slopes
Animals affected: cattle, sheep, horses

Stipa neomexicana (Thurb.) Scribn.

Common name: New Mexico feathergrass
Toxin: mechanical injury from mature awns
Habitat: dry hills
Animals affected: cattle, sheep, horses

Stipa robusta (Vasey) Scribn.

Common name: sleepygrass
Toxin: unknown narcotic
Habitat: open slopes, northern to south-central New Mexico
Animals affected: horses

Zea mays L.

Common name: common maize
Toxin: nitrates
Habitat: cultivated
Animals affected: cattle

* Major poisonous plant

Polygalaceae

Polygala sanguinea (L.) Farwell
Common name: milkwort, snakeroot
Toxin: irritant drug
Habitat: plains
Animals affected: horses

Polygonaceae

Beta vulgaris L.
Common name: beet, sugar beet
Toxin: oxalates, nitrates
Habitat: cultivated
Animals affected: cattle

Fagopyrum sagittatum Gilib.
Common name: buckwheat
Toxin: primary photosensitizer
Habitat: waste areas, roadsides
Animals affected: cattle, sheep, horses, goats, swine, fowl

Rheum rhaponticum L.
Common name: rhubarb
Toxin: oxalic acid in the leaf blades
Habitat: cultivated
Animals affected: cattle, sheep

Rumex acetosella L.
Common name: sheep sorrel, dock
Toxin: oxalates in the leaf blades
Habitat: disturbed places
Animals affected: sheep

Rumex crispus L.
Common name: curlyleaf dock
Toxin: oxalates
Habitat: cultivated fields, waste areas
Animals affected: sheep

Polypodiaceae

**Pteridium aquilinum* (L.) Kuhn.
Common name: bracken fern
Toxin: thiaminase
Habitat: open woods and clearings in the mountains
Animals affected: cattle, sheep, horses

Portulacaceae

Portulaca oleracea L.
Common name: common purslane

* Major poisonous plant

Toxin: oxalates
Habitat: waste areas, cultivated areas
Animals affected: sheep

Primulaceae

Anagallis arvensis L.
Common name: pimpernel
Toxin: unknown
Habitat: waste areas
Animals affected: sheep

Ranunculaceae

**Aconitum columbianum* Nutt.
Common name: monkshood
Toxin: alkaloids
Habitat: moist ground, often along streams
Animals affected: cattle, sheep, horses

Actea arguta Nutt.
Common name: baneberry
Toxin: irritant oil
Habitat: woods
Animals affected: cattle, sheep, horses, humans

Anemone patens L.
Common name: pasque flower
Toxin: glycoside
Habitat: open meadows
Animals affected: sheep

Caltha leptosepala DC.
Common name: elk slip, March marigold
Toxin: glycoside
Habitat: wet meadows, boggy ground
Animals affected: cattle, sheep

**Delphinium barbeyi* Huth.
Common name: Barbey larkspur, tall larkspur
Toxin: alkaloids
Habitat: open meadows
Animals affected: cattle, occasionally sheep

**Delphinium nelsonii* Greene
Common name: Nelson larkspur
Toxin: alkaloids
Habitat: dry plains
Animals affected: cattle, sheep, horses

**Delphinium occidentale* Wats.
Common name: larkspur

Ranunculaceae (contd.) _____

Toxin: alkaloids

Habitat: dry slopes in oak scrub

Animals affected: cattle, sheep, horses

**Delphinium robustum* Rydb.

Common name: larkspur

Toxin: alkaloids

Habitat: mountain meadows

Animals affected: cattle, sheep, horses

**Delphinium virescens* Nutt.

Common name: larkspur

Toxin: alkaloids

Habitat: dry plains and hills

Animals affected: cattle, sheep, horses

Ranunculus cymbalaria Purch

Common name: alkali buttercup, trailing buttercup

Toxin: glycoside

Habitat: wet ground

Animals affected: cattle, sheep, horses

Ranunculus sceleratus L.

Common name: crowfoot, buttercup

Toxin: glycoside

Habitat: marshy ground

Animals affected: cattle, sheep, horses

Rosaceae _____

**Cercocarpus montanus* Raf.

Common name: mountain mahogany

Toxin: cyanogenetic glycosides

Habitat: dry hillsides

Animals affected: cattle

Malus sylvestris Mill.

Common name: apple

Toxin: cyanide in leaves

Habitat: cultivated

Animals affected: cattle, horses, mules

Prunus armeniaca L.

Common name: apricot

Toxin: cyanogenetic glycoside, especially in seeds (pits)

Habitat: cultivated

Animals affected: cattle, sheep, horses

Prunus persica Batsch

Common name: peach

Toxin: cyanogenetic glycoside, especially in seeds (pits)

Habitat: cultivated

Animals affected: cattle, sheep, horses

**Prunus serotina* Ehrh.

Common name: southwestern chokecherry

Toxin: cyanogenetic glycoside

Habitat: along streams

Animals affected: cattle, sheep, horses

**Prunus virginiana* L.

Common name: chokecherry

Toxin: cyanogenetic glycoside

Habitat: moist canyons and slopes

Animals affected: cattle, sheep

Santalaceae _____

Comandra umbellata (L.) Nutt.

Common name: bastard toadflax

Toxin: alkaloids, glycosides, selenium

Habitat: plains and forested slopes; parasitic on other plants

Animals affected: cattle, sheep, horses

Scrophulariaceae _____

Castilleja spp.

Common name: paintbrushes

Toxin: selenium

Habitat: foothills and plains

Animals affected: cattle

Sinopteridaceae _____

Dryopteris filix-mas (L.) Schott

Common name: malefern

Toxin: thiaminase

Habitat: damp, rocky places, often along streams

Animals affected: horses

**Notholaena sinuata* (Lag.) Kaulf. var. *cochisenis* (Goodding) Weath.

Common name: Jimmy fern, cloak fern

Toxin: unknown, passed through the milk

Habitat: dry, rocky areas, along canyon walls

Animals affected: sheep

* Major poisonous plant

Solanaceae

Datura stramonium L.

Common name: Jimsonweed

Toxin: alkaloids

Habitat: waste or cultivated ground

Animals affected: cattle, sheep, horses, swine, mules, chickens, humans

Datura wrightii Regel.

Common name: datura, thornapple

Toxin: alkaloids

Habitat: mesas and waste grounds

Animals affected: cattle, sheep, horses, swine, mules, chickens, humans

Hyoscyamus niger L.

Common name: henbane

Toxin: alkaloids

Habitat: moist roadsides

Animals affected: cattle, sheep, fowl

Lycium halimifolium Mill.

Common name: matrimony vine

Toxin: unknown

Habitat: dry hills and plains

Animals affected: calves, sheep

Lycopersicon esculentum Mill.

Common name: tomato

Toxin: alkaloids in leaves and vines

Habitat: cultivated

Animals affected: cattle, swine

Nicotiana attenuata S. Wats.

Common name: coyote tobacco

Toxin: nicotine

Habitat: sandy ground near streams and washes

Animals affected: cattle, sheep, horses, swine

Nicotiana glauca Graham

Common name: tree tobacco

Toxin: nicotine

Habitat: along desert streams and washes

Animals affected: cattle, sheep, horses

Nicotiana trigonophylla Dunal

Common name: desert tobacco

Toxin: nicotine

Habitat: desert canyons, washes

Animals affected: cattle, sheep, horses

* Major poisonous plant

Physalis virginiana Mill. var. *sonora* (Torr.) Waterfall

Common name: groundcherry

Toxin: unknown

Habitat: moist ground, widespread

Animals affected: sheep

Solanum elaeagnifolium Cav.

Common name: silverleaf nightshade, horsenettle

Toxin: glycoalkaloids

Habitat: shaded slopes or waste areas

Animals affected: cattle, sheep

Solanum nigrum L.

Common name: black nightshade

Toxin: glycoalkaloids

Habitat: shaded slopes or waste areas

Animals affected: cattle, sheep, horses

Solanum rostratum Dunal.

Common name: buffalobur

Toxin: glycoalkaloids

Habitat: plains and waste areas

Animals affected: cattle, swine

Solanum sarachoides Sendt.

Common name: hairy nightshade

Toxin: glycoalkaloids

Habitat: waste areas

Animals affected: cattle, sheep, horses

Solanum triflorum Nutt.

Common name: cutleaf nightshade

Toxin: glycoalkaloids

Habitat: plains, roadsides, streambeds

Animals affected: cattle, horses

Typhaceae

Typha latifolia L.

Common name: cattail

Toxin: hayfever

Habitat: marshes, ponds

Animals affected: horses

Urtica gracilis Ait.

Common name: stinging nettle

Toxin: stinging hairs cause dermatitis, nitrates

Habitat: rich damp soil in thickets in mountains

Animals affected: horses

Verbenaceae

Aloysia wrightii (Gray) Heller

Common name: whitebrush

Toxin: unknown

Habitat: dry, rocky slopes, often on limestone soils

Animals affected: horses

Zygophyllaceae

Kallstroemia hirsutissima Vail

Common name: hairy caltrop

Toxin: unknown

Habitat: dry plains, widespread

Animals affected: cattle, sheep, goats

Peganum harmala L.

Common name: African rue

Toxin: alkaloids

Habitat: southern dry plains

Animals affected: cattle

**Tribulus terrestris* L.

Common name: puncturevine, goathead

Toxin: nitrates, photosensitizing compound, saponins

Habitat: disturbed areas

Animals affected: sheep

REFERENCES

- Fuller, T.C., and E. McClintock. 1986. *Poisonous plants of California*. Berkely: University of California Press.
- James, L.F., R.F. Keeler, A.E. Johnson, M.C. Williams, E.H. Cronin, and J.D. Olsen. 1980. Plants poisonous to livestock in the western states (Inf. Bul. 415). Washington, D.C.: U.S. Department of Agriculture.
- Kingsbury, J.M. 1964. *Poisonous plants of the United States and Canada*. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Norris, J.J., K.A. Valentine. 1957. *Principle livestock-poisoning plants of New Mexico ranges* (Circular 274). Las Cruces, NM: New Mexico State University Cooperative Extension Service.
- Schmutz, E.M., B.N. Freeman, and R.E. Reed. 1968. *Livestock-poisoning plants of Arizona*. Tucson: University of Arizona Press.

INDEX TO GENERIC AND COMMON NAMES

A

<i>Acacia constricta</i>	11	<i>Anagallis arvensis</i>	19
<i>Acacia greggii</i>	11	<i>Anemone patens</i>	19
<i>Achillea millefolium</i>	5	Annual goldeneye	8
<i>Aconitum columbianum</i>	19	Annual psathyrotes	7
<i>Actea arguta</i>	19	Annual sage	15
African rue	22	<i>Anthemis cotula</i>	5
<i>Agave lechuguilla</i>	4	<i>Apium graveolens</i>	4
<i>Agropyron cristatum</i>	17	<i>Apocynum androsaemifolium</i>	4
<i>Agrostemma githago</i>	9	<i>Apocynum cannabinum</i>	4
Alfalfa	13	Apple	20
Alkali buttercup	20	Apricot	20
Alkali milkvetch	13	<i>Argemone mexicana</i>	16
<i>Aloysia wrightii</i>	22	<i>Argemone polyanthemos</i>	16
Alsike clover	14	<i>Aristida</i> spp.	17
<i>Amaranthus palmeri</i>	4	Arrowgrass	15
<i>Amaranthus retroflexus</i>	4	<i>Artemisia filifolia</i>	5
<i>Amsinckia intermedia</i>	8	<i>Artemisia spinescens</i>	5
		<i>Asclepias asperula</i>	5

* Major poisonous plant

<i>Asclepias incarnata</i>	5	Baneberry	19
<i>Asclepias latifolia</i>	5	<i>Barbarea vulgaris</i>	9
<i>Asclepias pumila</i>	5	Barbey larkspur	19
<i>Asclepias speciosa</i>	5	Barilla	10
<i>Asclepias subverticillata</i>	5	Barley	18
<i>Asclepias verticillata</i>	5	Bassia	10
Asparagus	15	<i>Bassia hyssopifolia</i>	10
<i>Asparagus officinalis</i>	15	Bastard toadflax	20
Aster	5, 6	Beaked milkvetch	12
<i>Aster adscendens</i>	5	Beargrass	4
<i>Aster coeruleus</i>	5	Beet	19
<i>Aster commutatus</i>	6	Bermudagrass	17
<i>Aster ericoides</i>	6	<i>Berula erecta</i>	4
<i>Aster glaucoides</i>	6	<i>Beta vulgaris</i>	19
<i>Aster laevis</i>	6	Bird of paradise	14
<i>Aster occidentalis</i>	6	Birdsfoot trefoil	13
<i>Aster pauciflorus</i>	6	Bitter rubberweed	7
<i>Astragalus albulus</i>	11	Bitterweed	7
<i>Astragalus allochrous</i> var. <i>allochrous</i>	11	Black-eyed Susan	8
<i>Astragalus allochrous</i> var. <i>playanus</i>	11	Black locust	14
<i>Astragalus bisulcatus</i> var. <i>bisulcatus</i>	12	Black mustard	9
<i>Astragalus bisulcatus</i> var. <i>haydenianus</i>	12	Black nightshade	21
<i>Astragalus canadensis</i>	12	Bluebonnet	13
<i>Astragalus confertiflorus</i>	12	Blue loco	12
<i>Astragalus drummondii</i>	12	Blue panicum	18
<i>Astragalus emoryanus</i>	12	Bouncing bet	10
<i>Astragalus flavus</i>	12	<i>Bouteloua</i> spp.	17
<i>Astragalus lentiginosus</i> var. <i>diphysus</i>	12	Bracken fern	19
<i>Astragalus lentiginosus</i> var. <i>lentiginosus</i>	12	<i>Brassica hirta</i>	9
<i>Astragalus mollissimus</i> var. <i>earlei</i>	12	<i>Brassica kaber</i>	9
<i>Astragalus mollissimus</i> var. <i>mollissimus</i>	12	<i>Brassica nigra</i>	9
<i>Astragalus nothoxys</i>	12	Broadleaf milkweed	5
<i>Astragalus oocalycis</i>	12	<i>Bromus diandrus</i>	17
<i>Astragalus pattersonii</i>	12	<i>Bromus inermis</i>	17
<i>Astragalus pectinatus</i>	12	<i>Bromus rubens</i>	17
<i>Astragalus praelongus</i> var. <i>praelongus</i>	12	<i>Bromus tectorum</i>	17
<i>Astragalus praelongus</i> var. <i>ellisiae</i>	13	Broom groundsel	8
<i>Astragalus racemosus</i> var. <i>longisetus</i>	13	Broom snakeweed	7
<i>Astragalus racemosus</i> var. <i>racemosus</i>	13	Broomweed	6
<i>Astragalus tephrodes</i>	13	Buckwheat	19
<i>Astragalus thurberi</i>	13	Bud sagebrush	5
<i>Atriplex canescens</i>	10	Buffalobur	21
<i>Atriplex nuttallii</i> var. <i>cuneata</i>	10	Bulrush	10
<i>Atriplex rosea</i>	10	Burclover	13
<i>Avena fatua</i>	17	Burrowweed	7
<i>Avena sativa</i>	17	Buttercup	20

B

<i>Baccharis pteronioides</i>	6
Bahia	6
<i>Bahia oppositifolia</i>	6
<i>Baileya multiradiata</i>	6

C

<i>Caesalpinia gilliesii</i>	14
<i>Caltha leptosepala</i>	19
Canada milkvetch	12
<i>Cannabis sativa</i>	9

Carelessweed	4
<i>Cassia fasciculata</i>	13
<i>Castilleja</i> spp.	20
Catclaw acacia	11
Cattail	21
Celery	4
<i>Centaurea repens</i>	6
<i>Centaurea solstitialis</i>	6
<i>Centaureium calycosum</i>	15
<i>Cercocarpus montanus</i>	20
Charlock	9
Cheatgrass	17
Cheeseweed	16
<i>Chenopodium album</i>	10
<i>Chenopodium ambrosioides</i>	10
<i>Chenopodium glaucum</i>	10
Chinaberry tree	16
Chokecherry	20
<i>Chrysothamnus nauseosus</i>	6
Cibola milkvetch	11
<i>Cicuta maculata</i>	4
Cloak fern	20
Cocklebur	8
Colorado rubberweed	7
<i>Comandra umbellata</i>	20
Common groundsel	8
Common maize	18
Common poppy	16
Common purslane	19
Common sorghum	18
Common tansy	8
Coneflower	7
<i>Conium maculatum</i>	4
Conyza	6
<i>Conyza coulteri</i>	6
Copperweed	7
Corn cockle	9
Cornlily	15
<i>Corydalis aurea</i>	15
Cow cockle	10
Coyote tobacco	21
Creeping woodsorrel	16
Crotalaria	13
<i>Crotalaria sagittalis</i>	13
<i>Croton texensis</i>	11
Crowfoot	20
Cultivated oats	17
Curlycup gumweed	6
Curlyleaf dock	19
Cutleaf nightshade	21
<i>Cynodon dactylon</i>	17
<i>Cynoglossum officinale</i>	8

D

Dallisgrass	18
Datura	21
<i>Datura stramonium</i>	21
<i>Datura wrightii</i>	21
<i>Daucus carota</i>	4
Dead nettle	15
Death camas	15, 16
<i>Delphinium barbeyi</i>	19
<i>Delphinium nelsonii</i>	19
<i>Delphinium occidentale</i>	19
<i>Delphinium robustum</i>	20
<i>Delphinium virescens</i>	20
<i>Descurainia pinnata</i>	9
Desert baileya	6
Desert marigold	6
Desert tobacco	21
Dock	19
Dogbane	4
Dog fennel	5
Down cheat	17
Drummond milkvetch	12
<i>Drymaria pachyphylla</i>	9
Drymary	9
<i>Dryopteris filix-mas</i>	20

E

Elkslip	19
Ellis milkvetch	13
<i>Elymus</i> spp.	17
Emory milkvetch	12
<i>Equisetum arvense</i>	11
<i>Equisetum hiemale</i>	11
<i>Equisetum laevigatum</i>	11
<i>Eragrostis cilianensis</i>	17
Euphorbia	11
<i>Euphorbia albomarginata</i>	11
<i>Euphorbia esula</i>	11
<i>Euphorbia maculata</i>	11
<i>Euphorbia marginata</i>	11
<i>Euphorbia prostrata</i>	11
Eyebane	11

F

<i>Fagopyrum sagittatum</i>	19
False hellebore	15
<i>Festuca arundinacea</i>	17
Fewheaded aster	6
Fiddleneck	8
Field pennycress	9
Flax	16

<i>Flourensia cernua</i>	6
Four-wing saltbush	10
Fowl mannagrass	17
Foxtail barley	18
Foxtail chess	17
Frijolito	14

G

Galleta	17
Gambel oak	15
Garden pea	14
<i>Glyceria striata</i>	17
Goathead	22
Golden corydalis	15
Golden glow	7
Goosefoot	10
<i>Gossypium barbadense</i>	16
Gramma grasses	17
Gray aster	6
Greasewood	10
<i>Grindelia squarrosa</i>	6
Groundcherry	21
<i>Gutierrezia microcephala</i>	6
<i>Gutierrezia sarothrae</i>	7

H

Hairy caltrop	22
Hairy nightshade	21
Hairy vetch	15
Halfmoon locoweed	11
Halogeton	10
<i>Halogeton glomeratus</i>	10
<i>Haplopappus tenuisectus</i>	7
Havard shinoak	15
<i>Helenium autumnale</i>	7
<i>Helenium hoopesii</i>	7
<i>Helenium microcephalum</i>	7
Hemp dogbane	4
Henbane	21
Henbit	15
<i>Hilaria jamesii</i>	17
<i>Hilaria mutica</i>	17
<i>Hordeum jubatum</i>	18
<i>Hordeum vulgare</i>	18
Horsebrush	8
Horsenettle	21
Horsetail	11
Hound's tongue	8
<i>Hymenoxys odorata</i>	7
<i>Hymenoxys richardsonii</i>	7
<i>Hyoscyamus niger</i>	21
<i>Hypericum formosum</i>	15

I

Iceland poppy	16
Indian turnip	14
Inkweed	9
<i>Iris missouriensis</i>	15
Ironweed	8
<i>Isocoma wrightii</i>	7

J

Jackass clover	9
Jimmy fern	20
Jimmyweed	7
Jimsonweed	21
Johnsongrass	18

K

<i>Kallstroemia hirsutissima</i>	22
Kellogg's spurred lupine	13
Kentucky bluegrass	18
Kleinegrass	18
Kochia	10
<i>Kochia scoparia</i>	10

L

<i>Lactuca serriola</i>	7
Lambert's crazyweed	14
Lambsquarter	10
<i>Lamium amplexicaule</i>	15
Larkspur	19, 20
<i>Lathyrus polymorphus</i> var. <i>incanus</i>	13
Leafy spurge	11
Lechuguilla	4
<i>Linum neomexicanum</i>	16
<i>Linum usitatissimum</i>	16
<i>Lobelia cardinalis</i>	9
Locoweed	12
<i>Lolium perenne</i>	18
<i>Lotus corniculatus</i>	13
Lovegrass	17
Low whorled milkweed	5
Lucerne	13
Lupine	13
<i>Lupinus alpestris</i>	13
<i>Lupinus argenteus</i>	13
<i>Lupinus caudatus</i>	13
<i>Lycium halimifolium</i>	21
<i>Lycopersicon esculentum</i>	21

M

<i>Maclura pomifera</i>	16
Malefern	20

Mallow	16
<i>Malus sylvestris</i>	20
<i>Malva parviflora</i>	16
March marigold	19
Marijuana	9
Matchbrush	7
Matchweed	6
Matrimony vine	21
Mayweed	5
<i>Medicago hispida</i>	13
<i>Medicago sativa</i>	13
<i>Melia azedarach</i>	16
<i>Melilotus albus</i>	13
<i>Melilotus officinalis</i>	14
Mescal bean	14
Mesquite	14
Mexican elder	9
Mexican poppy	16
Milkwort	19
Milo	18
Mintweed	15
Mistletoe	16
Monkshood	19
Mountain golden pea	14
Mountain mahogany	20
Mountain pink	15

N

Needle-and-thread	18
Nelson larkspur	19
<i>Nerium oleander</i>	5
New Mexico feathergrass	18
New Mexico yellow flax	16
<i>Nicotiana attenuata</i>	21
<i>Nicotiana glauca</i>	21
<i>Nicotiana trigonophylla</i>	21
<i>Nolina microcarpa</i>	4
<i>Nolina texana</i>	4
<i>Notholaena sinuata</i> var. <i>cochisensis</i>	20
Nuttall saltbush	10

O

Oakleaf goosefoot	10
Oleander	5
Orange sneezeweed	7
Osage orange	16
<i>Oxalis corniculata</i>	16
<i>Oxytenia acerosa</i>	7
<i>Oxytropis lambertii</i>	14
<i>Oxytropis sericea</i>	14

P

Paintbrushes	20
<i>Panicum antidotale</i>	18
<i>Panicum capillare</i>	18
<i>Panicum coloratum</i>	18
<i>Papaver nudicaule</i> var. <i>radicatum</i>	16
<i>Papaver somniferum</i>	16
Paperflower	7
Parsnip	4
Partidge-pea	13
<i>Paspalum dilatatum</i>	18
Pasque flower	19
<i>Pastinaca sativa</i>	4
Patterson locoweed	12
Peach	20
<i>Peganum harmala</i>	22
Perennial ryegrass	18
Perennial snakeweed	6
<i>Phoradendron flavescens</i>	16
<i>Physalis virginiana</i> var. <i>sonora</i>	21
Pigweed	4
Pimpernel	19
Pingue	7
<i>Pinus ponderosa</i>	16
<i>Pisum sativum</i>	14
Plains bahia	6
Plains whorled milkweed	5
<i>Poa pratensis</i>	18
Poison hemlock	4
Poison ivy	4
Poison suckleya	10
<i>Polygala sanguinea</i>	19
Ponderosa pine	16
<i>Portulaca oleracea</i>	19
Prairie thermopsis	14
Prickly poppy	16
Prince's plume	9
<i>Prosopis glandulosa</i>	14
<i>Prunus armeniaca</i>	20
<i>Prunus persica</i>	20
<i>Prunus serotina</i>	20
<i>Prunus virginiana</i>	20
<i>Psathyrotes annua</i>	7
<i>Psilostrophe sparsiflora</i>	7
<i>Psilostrophe tagetinae</i>	7
<i>Psoralea argophylla</i>	14
<i>Psoralea tenuiflora</i>	14
<i>Pteridium aquilinum</i>	19
Puncturevine	22

Q			
Queen Ann's lace	4	Scouring rush	11
<i>Quercus gambelii</i>	15	Scurf pea	14
<i>Quercus havardii</i>	15	Sea-island cotton	16
R			
<i>Ranunculus cymbalaria</i>	20	<i>Secale cereale</i>	18
<i>Ranunculus sceleratus</i>	20	<i>Senecio flaccidus</i>	8
<i>Raphanus raphanistrum</i>	9	<i>Senecio riddellii</i>	8
Rattlebox	13	<i>Senecio spartioides</i>	8
Rattleweed	12	<i>Senecio vulgaris</i>	8
Rayless goldenrod	7	<i>Setaria lutescens</i>	18
Red brome	17	Sheep sorrel	19
Red clover	14	Shinnery	15
Red orache	10	Showy milkweed	5
Redroot amaranth	4	<i>Sideranthus grindelioides</i>	8
Red shadscale	10	Silky crazyweed	14
Red three-awn	17	Silky sophora	14
Reverchonia	11	Silverleaf nightshade	21
<i>Reverchonia arenaria</i>	11	Silverline locoweed	13
<i>Rheum rhaponticum</i>	19	Silvery lupine	13
Rhubarb	19	<i>Sium suave</i>	4
Riddell's groundsel	8	Sleepygrass	18
Ripgut brome	17	Smooth aster	6
<i>Robinia pseudoacacia</i>	14	Smooth brome	17
Rocky Mountain iris	15	Smooth horsetail	11
Rocky Mountain red elder	9	Snakeroot	19
Rough milkweed	5	Snakeweed	6, 7
Rubber rabbitbrush	6	Sneezeweed	7
Rubberweed	7	Snow-on-the-mountain	11
<i>Rudbeckia hirta</i>	8	Soapwort	10
<i>Rudbeckia laciniata</i>	7	<i>Solanum elaeagnifolium</i>	21
<i>Rumex acetosella</i>	19	<i>Solanum nigrum</i>	21
<i>Rumex crispus</i>	19	<i>Solanum rostratum</i>	21
Russian knapweed	6	<i>Solanum sarachoides</i>	21
Russian thistle	10	<i>Solanum triflorum</i>	21
Rye	18	<i>Sophora secundiflora</i>	14
S			
Sacahuista	4	<i>Sophora sericea</i>	14
<i>Salsola tragus</i>	10	<i>Sorghum bicolor</i>	18
<i>Salvia reflexa</i>	15	<i>Sorghum halepense</i>	18
<i>Sambucus mexicana</i>	9	Southwestern chokecherry	20
<i>Sambucus microbotrys</i>	9	Southwestern St. John's wort	15
Sand sagebrush	5	Spider antelopehorn	5
<i>Saponaria officinalis</i>	10	Spiny cocklebur	8
<i>Saponaria vaccaria</i>	10	Spiny horsebrush	8
<i>Sarcobatus vermiculatus</i>	10	Spotted spurge	11
Sartwellia	8	Spreading dogbane	4
<i>Sartwellia flaveriae</i>	8	Spurge	11
<i>Scirpus americanus</i>	10	<i>Stanleya pinnata</i>	9
		Stinging nettle	21
		Stinkgrass	17
		Stinking milkvetch	12
		<i>Stipa comata</i>	18
		<i>Stipa neomexicana</i>	18
		<i>Stipa robusta</i>	18

<i>Suckleya suckleyana</i>	10
Sugar beet	19
Summer cypress	10
Swamp milkweed	5

T

Tailcut lupine	13
Tall fescue	17
Tall larkspur	19
<i>Tanacetum vulgare</i>	8
Tansy mustard	9
Tarbush	6
<i>Tetradymia canescens</i>	8
<i>Tetradymia spinosa</i>	8
Texas croton	11
<i>Thermopsis montana</i>	14
<i>Thermopsis rhombifolia</i>	14
Thimble weed	7
<i>Thlaspi arvense</i>	9
Thornapple	21
Threadleaf groundsel	8
Thurber milkvetch	13
Tine-leaved milkvetch	12
Tobosa	17
Tomato	21
<i>Toxicodendron radicans</i>	4
Trailing buttercup	20
Tree tobacco	21
<i>Tribulus terrestris</i>	22
<i>Trifolium hybridum</i>	14
<i>Trifolium pratense</i>	14
<i>Trifolium repens</i>	14
<i>Triglochin maritima</i>	15
<i>Triglochin palustris</i>	15
Tumbleweed	10
Turpentine weed	6, 7
Two-grooved milkvetch	12
<i>Typha latifolia</i>	21

U

<i>Urtica gracilis</i>	21
------------------------	----

V

<i>Veratrum californicum</i>	15
<i>Vicia villosa</i>	15
<i>Viguiera annua</i>	8

W

Water hemlock	4
Water parsnip	4
Western aster	6
Western cardinal flower	9
Western whorled milkweed	5
Western yellow pine	16
Wheatgrass	17
Whitebrush	22
White clover	14
Whitethorn acacia	11
White loco	14
White mustard	9
White sweetclover	13
Whorled milkweed	5
Wild carrot	4
Wild lettuce	7
Wild oats	17
Wild pea	13
Wild radish	9
Wild rye	17
Wintervetch	15
<i>Wislizenia refracta</i>	9
Witchgrass	18
Woolly locoweed	12
Wooton locoweed	11

X

<i>Xanthium spinosum</i>	8
<i>Xanthium strumarium</i>	8

Y

Yarrow	5
Yellow bristlegrass	18
Yellow milkvetch	12
Yellow rocket	9
Yellow starthistle	6
Yellow sweetclover	14
Yerba-de-pasmo	6

Z

<i>Zea mays</i>	18
<i>Zigadenus gramineus</i>	15
<i>Zigadenus paniculatus</i>	16
<i>Zigadenus venenosus</i>	15

New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.