

Livestock List for
Plants that are Harmful to Manitoba Pets and Livestock
by Dr. Eva Pip

Plant	Compounds	Animals Affected	Symptoms
Cycadaceae	Cycasin B-L-alanine	Cattle	Intestinal/stomach bleeding, liver failure, weakness, paralysis of hind legs (may resemble BSE)
Taxaceae: Yew	Diterpenes, alkaloids	Horses	Trembling and sudden death (within minutes) due to cardiac arrest, often with unchewed leaves still in mouth. As little as 100 g fatal.
Taxaceae: Yew	Diterpenes, alkaloids	Cattle	Cardiac and respiratory arrest, rapid death.
Castor bean <i>Ricinus communis</i>	Ricin, ricinoleic acid	Horses	May 2-3 days delay. Severe sweating, loss of coordination, shock, fever, colic, diarrhea, convulsions. Less than 10 seeds have been reported fatal.
Onion and chives: <i>allium</i> spp.	Dipropenyl disulphides	Horses	Hemolytic anemia. Most frequently in spring
Onion and chives: <i>allium</i> spp.	Dipropenyl disulphides	Cattle	Hemolytic anemia.
Poppy: <i>Papaver</i> spp.	Opiate alkaloids	Horses	Agitation, alarm, neighing, severe constipation, prostration, can be fatal.
Poppy: <i>Papaver</i> spp.	Opiate alkaloids	Cattle	Agitation, loss of appetite, breathing difficulty, coma.
Monkshood: <i>Aconitum</i> spp.	Aconitine	Horses	Weakness, appetite loss, breathing difficulty, cardiac arrest.
Buttercups: <i>Ranunculus</i> spp.	Protoanemonine and others	Horses	Breathing difficulty, can be lethal. Will avoid in pastures, unless starving.
Buttercups: <i>Ranunculus</i> spp.	Protoanemonine and others	Cattle	Breathing difficulty, bloody diarrhea, liver damage, can be lethal. Also lethal to turtles.
Potato and tomato: Leaves, fruits, green or sprouted tubers	Solanine and others	Horses	Listlessness, appetite loss, weight loss, colic
Potato and tomato: Leaves, fruits, green or sprouted tubers	Solanine and others	Cattle	Digestive upset, distress, weight loss
Tobacco: <i>Nicotiana</i> spp.	Nicotine, anabasine	Horses	Appetite loss, muscle spasms (particularly neck and shoulders), colic, paralysis, prostration. Can be fatal.
Bracken Fern <i>Pteridium</i>	Thiaminase (causes vitamin B1 deficiency)	Horses	Cumulative. Muscle tremors, staggering, agitation, constipation, may adopt spread-legged "foundering" stance, pressing head against solid object, convulsions, can be lethal (Treatment: thiamine injections)
Horsetails: <i>Equisetum</i> spp.	Thiaminase, alkaloids, toxic metal accumulation	Horses	Vitamin B1 deficiency, muscle spasms, animal becomes very quiet, can be lethal
Red Maple <i>Acer rubrum</i> (also silver x red maple crosses) Dry or wilted leaves only	Unidentified agent.	Horses	Elevated breathing and heart rate, liver failure, brown urine. Severe methemoglobinemia. Can be fatal. (Treatment: blood transfusion and ascorbic acid injections)
Oaks: <i>Quercus</i> spp.	Gallotannins	Horses	Appetite loss, weakness, kidney

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Acorns and young leaves			damage. Foals may develop craving for acorns, ultimately lethal if consumption continues for more than a week.
Oaks: <i>Quercus</i> spp. Acorns and young leaves	Gallotannins, quercitrin, quercitin	Cattle	Appetite loss, weakness, cud chewing ceases. Constipation followed by black diarrhea. Cessation of lactation. Irreversible kidney damage. Very high mortality in cows.
Horse Chestnut <i>Aesculus hippocastaneum</i>	Saponins, aglycones	Horses	Muscle spasms, weakness, desire to lie down
Horse Chestnut <i>Aesculus hippocastaneum</i>	Saponins, aglycones	Cattle	Listlessness, tendency to repeated falling, neck spasms, kidney damage
Walnut: <i>Juglans</i> spp.	Unidentified agent	Horses	Contact with walnut wood shavings in bedding induces leg swelling and laminitis (foundering) after a few hours of contact. Inability to walk, listlessness, breathing difficulty.
Elderberry <i>Sambucus canadensis</i>	Cyanogenic glycosides, alkaloids	Horses	Loss of appetite, diarrhea, abdominal distress, rapid breathing
Cherry and Plum: <i>Prunus</i> spp. Leaves and bark	Cyanogenic glycosides, primarily amygdalin	Horses	Agitation, staring eyes, flared nostrils, dripping saliva, rapid breathing, almond odor on breath, paralysis, can be fatal within minutes
Rhubarb: <i>Rheum</i> spp.	Oxalic acid, dihydroxyanthracene	Horses	Appetite loss, kidney failure, convulsions
Larkspurs: <i>Delphinium</i> spp.	Alkaloids	Horses	Difficulty standing, breathing difficulty
Larkspurs: <i>Delphinium</i> spp.	Alkaloids	Cattle	Paralysis, falling with violent attempts to stand up, choking, life-threatening bloat, convulsions.
Angel's Trumpet: <i>Datura</i> and <i>Brugmansia</i> spp.	Alkaloids	Horses	Thirst, inability to urinate, rapid breathing, rapid heart rate, prostration
Lupines <i>Lupinus</i> spp.	Alkaloids	Horses	Leg spasms, diarrhea, convulsions, breathing difficulty, liver damage
Lupines <i>Lupinus</i> spp.	Alkaloids	Cattle	Staggering, convulsions, breathing difficulty, malformed calves
Water Hemlock, Snakeroot <i>Cicuta</i> spp. Roots and young leaves	Polyalkynes	Horses	Salivation, frothing, weakness, twitching, partial blindness, convulsions accompanied by grinding of teeth, rapid death (Treatment: immediate pentobarbital injection)
Water Hemlock, <i>Cicuta</i> spp.	Polyalkynes	Cattle	Salivation, weakness, convulsions, rapid death (Treatment: immediate pentobarbital injection)
Brassicaceae: mustards, canola	Glucosinolates, mustard oil glycosides, thiocyanates, thiooxazolidone	Horses	Appetite loss, salivation, diarrhea, impaired thyroid function, acute distress
Brassicaceae: mustards, canola	Glucosinolates, mustard oil glycosides,	Cattle	Appetite loss, impaired thyroid and liver function, bloat, partial blindness, blood in urine, aggressive behavior,

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	thiocyanates, nitrates		pulmonary emphysema
Buckwheat <i>Fagopyrum sagittatum</i>	Photosensitizing pigment (fagopyrin)	Horses	Itching and blistering on areas exposed to sunlight. Most pronounced in greys.
<i>Heliotropium</i> spp.	Pyrrolizidine alkaloids	Horses	Delayed onset (several weeks) weakness, swelling, liver failure. Also toxic to birds and pigs.
<i>Heliotropium</i> spp.	Pyrrolizidine alkaloids	Cattle	Delayed onset (several weeks) weakness, swelling, liver failure
'Milkweeds': <i>Asclepias</i> spp.	Toxic latex, alkaloids, glycosides, resinoids	Horses	Fever, difficulty standing, muscle spasms, breathing difficulty, coma
'Milkweeds': <i>Asclepias</i> spp.	Toxic latex, alkaloids, glycosides, resinoids	Cattle	Bloat, difficulty standing, muscle spasms, breathing difficulty, coma
Creeping Charlie <i>Glechoma hederacea</i>	Irritant oils	Horses	Severe sweating, frothing, breathing difficulty. Occasionally fatal.
Groundsels and ragworts: <i>Senecio</i> spp.	Pyrrolizidine alkaloids	Horses	Excited, fearless, aggressive, "walking disease", collides with fences, buildings, cars; colic, liver damage
Sweet pea: <i>Lathyrus</i> spp. Seeds	Nitriles	Horses	Lameness, skeletal abnormalities, paralysis, agitation
Sweet pea: <i>Lathyrus</i> spp. Seeds	Nitriles	Cattle	Skeletal deformation due to cartilage overgrowth, lameness, paralysis, excitability. Can be fatal.
<i>Lobelia</i> spp.	Alkaloids	Horses	Salivation, loss of appetite, hemorrhage
<i>Lobelia</i> spp.	Alkaloids	Cattle	Bloat, runny nose, salivation, loss of appetite, hemorrhage
Helen's flower: <i>Helonium</i> spp.	Glycosides, alkaloids	Horses	Salivation, fever, rapid heart rate, weakness, difficult breathing. Can be fatal.
Helen's flower: <i>Helonium</i> spp.	Glycosides, alkaloids	Cattle	Salivation, rapid heart rate, weakness, difficult breathing, convulsions. Can be fatal. Toxins can be passed to milk.
Tansy <i>Tanacetum</i> spp.	Tanacetin oil	Horses	Rapid feeble pulse, severe gastrointestinal upset, convulsions
Tansy <i>Tanacetum</i> spp.	Tanacetin oil	Cattle	Rapid feeble pulse, severe abdominal distress, convulsions, abortion
St. John's Wort: <i>Hypericum</i> spp.	Hypericin	Horses	Reacts with sunlight to produce red skin, itching, blindness, breathing difficulty, loss of appetite. Primarily in light-skinned animals. May be fatal.
Ferns <i>Pteridium Dryopteris</i>	Ptaquiloside	Cattle	Acute: fever, bleeding from nose and eyes, blood in urine and sweat, bone marrow destruction Chronic: appetite loss, salivation, fever, weakness, blindness, blood in urine and feces, decreased milk production, bladder and other cancers
Conifers: cedar, juniper, cypress, pine	Essential oils and oleoresins (e.g. diterpenes)	Cattle	Abortion, premature calving, retained placenta, Cedar can be fatal.
Queen Anne's Lace <i>Ammi</i> spp.	Furanocoumarins	Cattle	Skin and eye irritation, swelling of face

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Hellebores: <i>Helleborus</i> spp.	Cardiac glycosides	Cattle	Cardiac arrest, rapid death
<i>Iris</i> spp.	Irisin and others	Cattle	Breathing difficulty, loss of appetite, severe diarrhea
'Coneflower': <i>Rudbeckia</i> spp.	Unidentified	Cattle	Aimless wandering, poor coordination, rapid breathing, digestive distress
Foxgloves: <i>Digitalis</i> spp.	Cardiac glycosides	Cattle	Cardiac arrest, rapid death
Spurges: <i>Euphorbia</i> including wild spp.	Toxic latex	Cattle	Diarrhea, weight loss, weakness, hair loss on feet
Beet, chard: <i>Beta vulgaris</i> Leaves and tops only	Oxalic acid (up to 12% in leaves), goitrogenic glycosides, nitrates	Cattle	Appetite loss, impaired thyroid function, kidney damage. Large amounts can be fatal.
Lettuce <i>Lactuca sativa</i> Bolted lettuce	Toxic latex, nitrates	Cattle	Staggering, breathing difficulty, similar to poppy ("lettuce opium poisoning")
Lima bean: <i>Phaseolus lunatus</i> All green parts	Cyanogenic glycosides	Cattle	Breathing difficulty, liver damage, distress