

Weeds in the News 2012 Castor Bean

By Robin Kusske

Castor bean (*Ricinus communis*)



Image from Wikipedia



Images from USDA website



Though not on the State Noxious Weed List (R.C.W. 17.10), there is enough concern to warrant an article warning gardeners of the dangers of the Castor Bean.

The Castor bean plant (*Ricinus communis*) is a member of the Spurge Family (*Euphorbiaceae*). It is a fast growing suckering woody herb with weedy tendencies. Leaves consist of eight radiating slightly serrated leaflets with prominent veins. Flowers are usually green and inconspicuous, but may be pink or red in some varieties. The fruit are soft spined containing mottled seeds that resemble beans. It is grown as a houseplant, as an ornamental in gardens and may grow as a weed. Grown as a perennial in the tropics, in our climate it is grown as an annual. It may reach a height of 15 feet when grown outdoors.

The entire plant is toxic, especially the seeds, to both man and animal alike. The seed contains *Ricin*, a toxin, which is also present in lower concentrations throughout the plant. One milligram of ricin can kill an adult (about 3-4 seeds). It is poisonous if inhaled, injected or ingested. Long term organ damage is likely in survivors. Death typically occurs within 3–5 days of the initial exposure.

Symptoms include nausea, diarrhea, abdominal pain, vomiting, severe dehydration, decrease in urination, decrease in blood pressure and seizures persisting for up to a week. Children are more sensitive than adults to fluid loss due to vomiting and diarrhea, and can quickly become severely dehydrated and die. It has been considered for use as a biological weapon of warfare since World War I. Its potency proved it too risky for both sides and has remained in the arsenal, but rarely used except by terrorists.

Castor seed is the source of castor oil, which has a wide variety of uses, including medicinal and as a source of fuel oil for lamps in ancient Egypt. The seeds contain between 40% and 60% oil that is rich in triglycerides, mainly ricinolein. It is a major ingredient for Castrol racing oil. It is the byproduct of the seeds, pressed to release their oil. The resulting dry pulp has even poisoned workers who breathe its fine dust.

Because of its weedy tendencies and suckering ability, its toxicity, and the attraction children have to the plant and its seeds, it is highly recommended to remove and control all castor bean plants before they become a problem, especially if they are in an area that children or pets could access.

For more information on Castor bean contact the Franklin County Noxious Weed Control Board or your local extension agent.