

PRICKLY LETTUCE

Lactuca serriola L.



Overview:

Prickly lettuce is a winter annual weed often found in no-till soybeans and winter wheat, or along field edges. It is sometimes referred to as "wild lettuce", because it is closely related to, and inter-fertile with, cultivated lettuce. Another common name is "compass plant", because the leaves on the main stem are held vertically in a north-south plane, perpendicular to direct sunlight. The French common name for prickly lettuce is "laitue scariolle", which derives from its scientific name, *Lactuca serriola* or *Lactuca scariola*.

Habitat:

Prickly lettuce is drought tolerant and competes strongly with soybeans for water in a dry season, resulting in reduced yield. In winter wheat it can have detrimental effects on crop value and harvesting efficiency. If the plant is in flower at grain harvest, the flower buds can be difficult to screen out of the grain, resulting in discounted prices. The sticky white latex in the stems can clog harvesting equipment and raise the moisture content of the grain. Stem latex is less of a problem at soybean harvest, when plants have senesced, and stems have dried.

Identification:

Seed production is proportional to plant height. Plants that are 0.5 m tall produce about 35 flower heads, where-as

plants that are 1.5 m tall can produce as many as 2,300 flowers. Each flower head contains an average of 20 seeds, giving an estimated seed production of 700 and 46,000 seeds per plant, respectively. Most seeds are viable and ready to germinate immediately after dispersal. Prickly lettuce forms only a short-term seed bank, with seeds surviving 1-3 years in soil.

Prevention:

Russian knapweed can be a contaminant in hay.

Control:

Cultivation: Seedlings and rosettes of prickly lettuce are easily controlled by cultivation, and it is not usually found in tilled fields. Mowing of rosettes is not an effective control practice, because leaves lie close to the soil surface. Plants that are mown after stem extension readily produce new stems or branches and flowers.

Chemical: Rosettes of prickly lettuce can be controlled in the fall or spring by non-selective herbicides containing glyphosate, glufosinate ammonium, or paraquat, with larger rosettes requiring higher rates. Plants are difficult to control

with herbicides once the flowering stems have begun to elongate. Preemergence applications of products containing atrazine, metribuzin, napropamide, chlorsulfuron, isoxaben, oxyfluorfen, oxadiazon or terbacil will usually control germinating seedlings. Postemergence applications of 2,4-D, MCPA, dicamba, clopyralid, bromoxynil plus atrazine, metribuzin, linuron with oil, or thifensulfuron-methyl/tribenuron-methyl, can control prickly lettuce rosettes in a variety of crops. Postemergence application of products containing cloransulam-methyl or chlorimuron-ethyl in soybeans provide suppression but not complete control.

Biological: No biological controls researched to date.

