Weed focus: Pokeweed

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Phytolacca americana L., better known as "pokeweed" is a warm-season perennial plant native to North America. Its most distinguishing features are its red stem and dark purple berries. Plants can grow to be 8 feet tall and resemble large shrubs, which are considered to be a nuisance by many. Their berries, however, are an important food source for many songbirds and small animals which are not affected by the toxins in pokeweed.

The pokeweed stem begins green when it first emerges, but quickly gains its characteristic red color as it elongates (photo at right). It has simple green leaves. The plant has a large taproot, making it difficult to kill. The flowers grow on racemes, are white to green, and have 4 to 5 sepals but no petals (below left). Dark purple fruits containing seeds replace the flowers as the plant senesces (below right). The seeds can remain viable in the soil for many years, adding additional challenge to controlling this plant.







All parts of the pokeweed plant are toxic to humans and livestock. They contain oxalic acid, saponins, and phytolaccin. The root contains the highest level of toxins, followed by the leaves and stems, with the berries having the lowest concentrations. Toxicity symptoms range from burning sensation in the mouth,





salivation, cramps, and bloody diarrhea, in the case of ingesting small quantities of pokeweed, to anemia, altered heart rate, and respiratory failure, when large quantities are consumed. Birds are apparently immune to toxicity.

Controlling pokeweed in pastures: There are no easy solutions to controlling pokeweed because it is easily spread by birds or small animals that distribute seeds after consuming the berries. Its large taproot makes it very resilient. While pokeweed is aggressive, it is not considered invasive and repeatedly cutting back new shoots can use up the energy reserves in the root and eventually eliminate the plant. If the affected area is too large for this strategy, systemic herbicides that will travel to and kill the root can be effective on existing plants. The following herbicides will provide more effective control if sprayed in late summer and early fall. Glyphosate is one option, keeping in mind that this chemical is not selective and will kill most of the vegetation it contacts, good or bad. Triclopyr mixed with 2,4-D is a fairly cost-effective application, especially when used with spot application techniques. Aminopyralid with 2,4-D can also be applied as a spot application. Either of these herbicides may also be broadcast sprayed over larger areas where grasses represent the predominant vegetation. When using these pesticides, follow label instructions and be mindful of residual soil activity that may affect future plantings.

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