Pasture Weed Fact Sheet

Chinese Privet

G. Neil Rhodes, Jr., Professor and Extension Weed Management Specialist Trevor D. Israel, Extension Assistant Department of Plant Sciences

Chinese Privet Ligustrum sinense Lour.

Classification and Description

Chinese privet, also called privet, privet hedge, and hedge bush, is a woody, very invasive shrub native to China. It was introduced into the United States in the early to mid-1800s as an ornamental plant; it later escaped from cultivation and has naturalized throughout the southeastern United States. The plant can grow as tall as 30 feet, but usually it ranges from 5 to 12 feet in height (Fig. 1). Leaves of the plant are up to 1 inch wide and 2 inches long with petioles approximately 0.125 inch long (Fig. 2). They are simple, opposite, and evergreen to semi-deciduous. Leaf blades are glabrous, entire, and have hairs along the midvein of the lower leaf surface. Stems are woody, and they are pubescent when young. Fragrant, white flowers are borne on panicles on short lateral branches at the end of twigs. The fruit, which turns blue to black at maturity, is a drupe containing one to four seed (Fig. 3).

Problems in Pastures and Hay Fields

Chinese privet spreads rapidly both from root sprouts and seed, and it can quickly displace native vegetation and dominate a large portion of a pasture (Fig. 4). Birds are particularly effective in seed dispersal. Dense shade formed by privet thickets eliminates grass and many other understory plants. The result is a drastic reduction in carrying capacity of a heavily infested pasture. Fruit of privet can be toxic, but problems in humans and animals are rare.



Fig. 2. Ovate leaves oppositely arranged on stem.



Fig. 1. Mature Chinese privet shrub



Fig. 3. Black fruits each containing one to four seed.



Fig. 4. Young plants spreading along a fencerow.



Management in Pastures and Hay Fields

Prevention through early identification and removal of initial invading plants is the most effective method of managing privet in pastures. Where already established and plants are small, mowing will delay growth and reduce seed production, but due to the plant's perennial root system, resprouting will occur. Privet can be controlled with foliar, cut stump and basal bark applications of herbicides. Whatever the method of herbicide application, landowners should be prepared for clean-up of heavily infested areas to take at least two to three years. And pastures located near heavily infested, unmanaged areas will be particularly challenging due to reinfestation from seed dispersal by birds.

Foliar applications

Foliar applications are effective on privet where complete coverage of all leaves is achievable. Glyphosate is recommended as an effective foliar herbicide for privet. However, higher spray concentrations are needed for privet than for other brush such as multiflora rose, for example. Based upon a formulation that is at least 41 percent active ingredient, prepare a 3 percent mixture of glyphosate in water (4 ounces per gallon of water) and apply as a high-volume foliar spray with a hose and handgun sprayer. Be sure to get complete coverage of all foliage, but not to the point of runoff as this wastes time and money. Late summer to fall applications provide better lasting control than those made earlier in the year. Remember that glyphosate is a non-selective herbicide; grass and other green vegetation will be killed or injured. However, glyphosate is not soil active and therefore grass can be reestablished in affected areas.



Fig. 5. Taller bushes may require cut stump or basal bark applications.

Cut stump applications

Cut stump applications are practical in situations where infestations are of low density, where damage to grass or other nearby vegetation needs to be prevented, or where bushes are too tall to achieve complete foliar coverage (Fig. 5). Effective options include Garlon 3A (triclopyr amine), Remedy Ultra (triclopyr ester) and glyphosate. Cut the stump off as close to the ground as practical with a pair of loppers or a chainsaw, depending on size of the bush. Paint or spray the entire surface of the stump within a few minutes of cutting. Take particular care to thoroughly treat the outer cambium or bark ring of the stump. When using Garlon 3A, prepare a 50 percent mixture in water (2) quarts of Garlon 3A and 2 quarts of water). Remedy Ultra is an emulsifiable concentrate, and for cut stump treatments it should be mixed with a basal oil or diesel fuel carrier at a 25 percent concentration (1 quart of Remedy Ultra with 3 quarts of basal oil or diesel fuel). Crop oil concentrate can be substituted for basal oil or diesel fuel when temperatures are above freezing, but a preliminary jar test to confirm compatibility is recommended. When spraying an oil or diesel fuel mixture, be sure to use a sprayer that has Viton seals. If using glyphosate (at least 41 percent active ingredient), prepare a 25 percent mixture of glyphosate in water (1 qt of glyphosate with 3 quarts of water).

Basal bark applications

Basal bark applications involve applying a herbicide and oil or diesel fuel mixture to the lower 12 inches of the stem or trunk. Complete coverage of all sides is required. Remedy Ultra is effective at a 25 percent concentration as described in the previous paragraph. As is the case with the cut stump method, this application is effective any time of the year, but best results are achieved with fall treatments. Also, regardless of the time of year of application, basal bark applications work slowly.

Persistence and patience are necessary

In many situations, complete eradication of privet is not attainable. As previously mentioned, pastures near woodlands that are heavily infested will be particularly challenging. New flushes of seedlings can be expected due to seed dispersal by birds and seed already present in the soil. Also, retreatment of large bushes due to incomplete coverage or root sprouting will be required in most cases. With close monitoring and diligence with spot treatments, productivity and quality of infested pastures can be improved.

Prior to application of any herbicide, be sure to thoroughly read and understand the herbicide label, and follow all directions and precautions. Also, remember that practicing good herbicide stewardship is everyone's responsibility. For more information on herbicide stewardship, please visit our website: herbicidestewardship.utk.edu.

References

Anonymous. 2009. Invasive watch: privet control - Chinese, European, Japanese. Dow AgroSciences, Indianapolis, IN. 3 pp.

Enloe, S. and S. Lowen. 2013. Control options for Chinese privet. Alabama Cooperative Extension System Publ. ANR-1468. Auburn, AL. 4 pp.

Miller, J. H. 2003. p. 21 *in* Nonnative invasive plants of southern forests. USDA Forest Service Southern Research Station General Technical Report SRS-62, Auburn AL. 95 pp.

Urbatsch, L. and M. Skinner. 2000. Chinese Privet. USDA NRCS Plant Guide. Baton Rouge, LA. 5 pp.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.



AG.TENNESSEE.EDU
Real. Life. Solutions.