

Buckhorn Plantain

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Buckhorn Plantain *Plantago lanceolata* L.

Classification and Description

Buckhorn plantain, also known as English plantain, narrow-leaved plantain, and ribwort plantain, is an erect cool-season perennial plant that is a member of the plantain family (Plantaginaceae). It may be confused with the similar species broadleaf plantain (*Plantago major* L.) or blackseed plantain (*Plantago rugelii* Dcne.), but these plants have much wider leaves. Buckhorn plantain is native to Europe and can be found throughout Tennessee in cultivated areas, hay fields, pastures and roadsides. The plant often acts like an annual herb and the seed leaves are linear and grasslike. Older leaves are linear to lanceolate, 2 to 12 inches long, 1/4 to 2 inches wide and have three to five prominent veins (Fig. 1). They form a basal rosette and may be smooth or pubescent (Fig. 2). Stems are erect, up to 2 feet tall, and topped with a dense spike inflorescence (Fig. 3). The flower heads are up to 4 inches long with tiny white to brown flowers. Fruits are an ellipsoidal capsule each containing two seeds that are black, boat-shaped, and 2 to 3 mm wide. Roots are slender and fibrous from a taproot (Fig. 4).

Problems in Pastures and Hay Fields

Although buckhorn plantain is not toxic to cattle and somewhat palatable, it can increase in density over time and compete with desirable forages. Older plants can become highly drought-tolerant due to the long taproot. Also, plants can regenerate from the taproot even when cut off at or below the soil surface. Due to its persistence and short growth habit, buckhorn plantain can become well established and difficult to control in pastures.



Fig. 2. Rosette growth form.



Fig. 3. Terminal flower spikes on stems.



Fig. 1. Leaves can have various lengths, but all have prominent ribs.



Fig. 4. Fibrous roots from a taproot.

Management in Pastures and Hay Fields

As is the case with most other weeds, prevention is an integral part of an overall management plan. Healthy, competitive stands of forage will shade the soil surface and make the establishment of new seedlings more difficult. Carefully scouting pastures and knowing how to recognize young plants will help prevent early introductions from becoming persistent problems. Because buckhorn plantain is low growing, it can tolerate heavy grazing and clipping (Fig. 5). Hand removal is difficult since the entire taproot must be removed. Fortunately, several herbicides are effective on buckhorn plantain.

The best time to spray is in the fall (late October to early December) or late winter to early spring (March to early April). One advantage of spraying in the fall may be time availability. Springtime is very busy for many producers who are in the middle of calving or preparing row crop ground. Another advantage of fall application is there may be fewer gardens and sensitive crops growing that can be injured by herbicide drift. Regardless of a fall or spring application, it is important to have three days where temperatures reach 60 F, so that herbicides can be most effective. These timings are also appropriate for buttercup and musk thistle control. Like buttercup, buckhorn plantain rosettes are low growing and the surrounding thatch should not be so tall that it prevents the spray from reaching the weeds.



Fig. 5. Low-growing rosettes can tolerate grazing and clipping.

Well-established buckhorn plantain can be controlled with 2,4-D ester at a rate of 3 to 4 pt/A. Heavy infestations may require a “1 – 2” punch, where weeds are sprayed in the fall and again in the spring, if necessary. Products containing aminopyralid + 2,4-D (GrazonNext HL), picloram + 2,4-D (Grazon P+D), and dicamba + 2,4-D (Brash, Weedmaster, Range Star) are also effective. Consider adding additional 2,4-D to GrazonNext HL to improve control. 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

- Bryson, C. T. and M. S. DeFelice, eds. 2009. p. 295 in *Weeds of the South*, Univ. of Georgia Press, Athens, GA 30602. 468 pp.
- Elmore, C. L., D. W. Cudney, M. E. McGiffen, Jr. 2007. *Plantains*. University of California Statewide IPM Program Publ. 7478. Davis, CA. 3 pp.

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