

## Pasture Weed Fact Sheet

# Spiny Amaranth

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**Spiny Amaranth** *Amaranthus spinosus* L.

### Classification and Description

Spiny amaranth, also known as hogweed, spiny pigweed, spiny carelessweed, or stickerweed, is an erect summer annual that is a member of the pigweed family (Amaranthaceae). Spiny amaranth is a native to tropical America and can be found throughout Tennessee. Seedlings begin emerging late spring and early summer (Fig. 1). The plant can grow as tall as 5 feet in height and can be found in many areas that might have poor stands of fescue or any bare soil. Mature plants can produce approximately 235,000 seeds per plant. Leaves are simple and alternate and can be 1 to 2 1/2 inches in length and 1/2 to 2 1/2 inches wide. Plants have a terminal flower spike (predominately male) and numerous axillary clusters, chiefly female (Figs. 2 and 3). Spiny amaranth can be easily differentiated from other species within the pigweed family by the stiff spines found at the nodes that can be as long as a quarter of an inch. Spiny amaranth has fibrous roots that come from a tap root that are sometimes red.

### Problems in Pastures and Hay Fields

Spiny amaranth is low in palatability; cattle and most livestock will graze around it. However, when other forage is limited it can be consumed, and it does have some known toxicity issues, such as myocardial degeneration, renal disease and nitrate intoxication. In the rumen, nitrates turn into nitrites, thus becoming toxic to cattle and other livestock. Spiny amaranth is not typically an issue in fields that are used for hay production. This plant is found in heavy use areas, for example, around a hay ring or where hay was fed the previous winter (Fig. 4).



Fig. 1. Seedlings.



Fig. 2. Spines and female flowers.



Fig. 3. Leaves and male flower spikes.

## 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. In the case of spiny amaranth, routine movement of hay feeders will reduce the amount of soil disturbance, which will reduce the development of problem weeds. Winter feeding areas do not have enough grass to adequately compete with weed seedlings. Spot treatment of problem areas will reduce the spread of spiny amaranth throughout pastures.



Fig. 4. Problem area at hay feeders.

Timely application of a herbicide is required to effectively control spiny amaranth. Spiny amaranth control is most effective when done during the seedling stage of growth (Fig. 1). Several herbicides control this problem weed, such as 2,4-D amine, Brash/Weedmaster (2,4-D + dicamba), GrazonNext HL (aminopyralid + 2,4-D). Late spring and summer application of these herbicides, when the weed is in the seeding stage, will provide control of spiny amaranth and prevent spreading in pastures during summer months.

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.com](http://herbicidestewardship.com)

## References

- Bryson, C.T. and M.S. DeFelice, M. S. (2009). Weeds of the South. Athens, GA: University of Georgia Press. p. 36
- Hill, R. (1986). Poisonous plants of Pennsylvania. Harrisburg, PA: Pennsylvania Dept. of Agriculture, Bureau of Plant Industry. [research.vet.upenn.edu/poisonousplants/Plants/PlantsbyLatinName/Amaranthusspecies/tabid/5607/Default.aspx](http://research.vet.upenn.edu/poisonousplants/Plants/PlantsbyLatinName/Amaranthusspecies/tabid/5607/Default.aspx)
- Holm, L.G., D.L. Plucknett, J.V. Pancho, and J.P. Herberger. (1991). The world's worst weeds. Malabar, FL: Krieger Publishing Company.

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