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Fireweed (Heartleaf nettle) Control in Pastures[1]

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Introduction

Fireweed (*Urtica chamaedryoides*) (Figure 1) is native to Florida, but has only recently become problematic. This winter annual species is commonly observed in north and central Florida pastures, particularly in bareground areas (near feeding pens and under fences) as well as along tree lines where forage grasses are less dense.

Figure 1. Fireweed (*Urtica chamaedryoides*).

Fireweed is particularly troublesome because it possesses stinging hairs that easily embed in skin. Once exposed to the toxin, severe irritation can occur for several hours. Though generally avoided by cattle, horses are more likely to browse fireweed and develop stress symptoms. These symptoms commonly manifest themselves as weight loss, or difficulty in swallowing and breathing for many days after consumption. In extreme cases, young horses have died after rolling in fireweed and becoming over-exposed to the toxins in the leaf hairs.

Biology

Fireweed leaves resemble that of a strawberry plant, (Figure 2) but the plant as a whole has little resemblance to strawberry. The plant has square stems and small pale green flower clusters. Small stinging hairs are found on the stems, petioles and leaves. These hairs contain irritants which have been shown to cause respiratory stress and local allergic reactions when ingested or inhaled.

Control

Little work has been reported for control of this seasonal species. Therefore, experiments were conducted to determine which pasture herbicides are most effective on fireweed.

It was observed that 2,4-D and Telar were ineffective on fireweed (Table 1). Glyphosate, which can be applied when pasture grasses are dormant, provided as much as 80% control. However, in other experiments we have found

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Figure 2. Fireweed leaves.

glyphosate to be inconsistent on fireweed, sometimes providing as little as 30% control. Since glyphosate can severely injure pasture grasses that are not fully dormant, and because of its inconsistency on fireweed, we do not recommend the use of this product.

Weedmaster at 1.5 qt/A did not provide acceptable levels of control, but GrazonNext, Remedy, and Pasturegard were found to be highly effective. Within 2 weeks of application, over 90% of the fireweed plants were dead and the remaining individuals were yellow and dying. By 6 weeks after treatment, no fireweed could be found.

It is our recommendation that GrazonNext, Remedy, or Pasturegard herbicides be used for effective control of fireweed. These herbicides can be applied any time of year to warm-season forage grasses. There are no grazing restrictions for beef cattle with these herbicides, but lactating dairy animals must be removed for 0 and 14 days with GrazonNext and Remedy, respectively, and one season for Pasturegard.

Mowing provides no benefit to control of this species. In fact, mowing has been found to result in smaller plants, but with many more stinging hairs. Additionally, the seed is surrounded by a sticky substance that can be transported by mower blades to areas not infested with this weed.

If not controlled, fireweed generally disappears in May with the onset of summer temperatures.

Table 1. Control of fireweed with various herbicides.

Herbicide	Rate Product/A	Herbicide cost [1] $ per acre	% Control	
			2 wat[2]	6 wat
2,4-D amine	2 qt	6	10	0
Weedmaster	1.5 qt	7	33	65
Remedy	1 qt	14-20	93	100
Pasturegard	1.5 qt	20	92	100
GrazonNext	1 qt	8	95	100
Glyphosate	1 qt	3	70	80
Telar	0.5 oz	10	30	10

[1]These are approximate values taken from "Approximate Herbicide Pricing" (http://edis.ifas.ufl.edu/wg056) and do not include application costs.
[2]wat=weeks after treatment.