

Old World Bluestem Treatment

This is intended to be a help guide to provide guidance on how to treat Old World Bluestems. There are 2 types - Caucasian Bluestem (*Bothriochola bladhii*) and Yellow Bluestem (*Bothriochola ischaemum*).

This information is based on guidance from Walt Fick of Kansas State University.

It is recommended that if using Arsenal® Herbicide at the 4-5 leaf stage (Approximately June 15th). This date is optimum however herbicide activity will still be present and provide some control as long as the plant still has green tissue.

Chemical	Rate of chemical	Rate of non-ionic surfactant	Rate of water	Date
Arsenal® Herbicide (apply this rate once)	0.5 lbs (2pt)/ac	8 oz/ac	15-20 gallons/ac	June 15th is optimum but apply at 4-5 leaf stage of plant

Formula Example for 50 acres:

Using the rate listed above

For Arsenal® Herbicide @ 0.5lbs/ac (2pt/ac)

$$\left(\frac{50ac}{1 Job}\right) \times \left(\frac{0.5 lb}{1 ac.}\right) \times \left(\frac{1 Gal Arsenal Herbicide}{2.0 lbs active ingredient}\right) = 12.5 \frac{Gal}{Job}$$

For Non Ionic Surfactant @ 8oz/ac

$$\left(\frac{50ac}{1 Job}\right) \times \left(\frac{8oz}{1 ac.}\right) \times \left(\frac{1 Gal Non Ionic Surfactant}{128oz product}\right) = 3.13 \frac{Gal}{Job}$$

For Water @ 16gal /ac

$$\left(\frac{50ac}{1 Job}\right) \times \left(\frac{16 gal}{1 ac.}\right) = 800 \frac{Gal}{Job}$$

Spot Treatments

Here is the suggested rates for a 2 lb/gallon formulation of Arsenal (imazapyr):

1 tablespoon of Arsenal per gallon of water = 0.4 lbs/acre if you apply 50 gpa with your backpack sprayer.

2 tablespoons of Arsenal per gallon of water = 0.3 lbs/acre if you apply 20 gpa with your backpack sprayer (about 1/2 cup of Arsenal in 4 gallons of water)

Use 1/2 cup of Arsenal in 4 gallons of water + 2 teaspoons of non-ionic surfactant.

A tablespoon is 0.5 fl oz.