A BETTER APPROACH TO CONTROLLING

Cogongrass

(IMPERATA CYLINDRICA)

Cogongrass is a fast-growing, rapidly spreading perennial grass that infests more than 1.25 billion acres worldwide. Extremely flammable, cogongrass can cause fast-moving, intense fires that threaten native plants, animals and communities. Using a proactive approach to vegetation management can decrease fire risks, slow the advance of this invasive weed and help restore native species habitats.

Professional Vegetation Management

BASF

The Chemical Company

A native of Southeast Asia, cogongrass affects land in 73 countries, including the United States. Already reported in forests, pastures, roadways and wetlands of warmer regions—Florida, Georgia, Alabama, Mississippi, Louisiana and South Carolina—cogongrass presents a growing problem of wide-spread proportion.

Cogongrass is extremely hardy. It is at home in a wide variety of soil types and ecosystems and is tolerant of shade, full sun, high salinity, drought, flooding, mowing and fire. Cogongrass is able to reproduce and spread via wind-borne seeds or sprouting rhizome fragments. It forms rapidly growing stands up to five feet and thick mats at ground level.

Benefits of a Herbicide Treatment:

- Controls the entire plant, including root system
- Allows for re-colonization of desirable species
- Can be mixed with glyphosate

According to studies conducted by the Agronomy and Soils Department at Alabama's Auburn University,[1] herbicides are a key component in the effective, long-term control of cogongrass.

Cogongrass distribution in the United States

Source: http://plants.usda.gov

Imperata cylindrica

Research and Data

Arsenal® Herbicide (2003)

Arsenal is recommended for controlling cogongrass in noncropland areas that include, but are not limited to, railroad, pipeline and highway right-of-ways, utility plant sites, petroleum tank farms, pumping installations, fence rows, storage areas, non-irrigation ditchbanks, wildlife openings within noncropland sites and other similar areas. In addition, **Arsenal** can be used to control cogongrass in pasture and rangeland.

Based on research conducted by the Agronomy and Soils Department at Alabama's Auburn University, **Arsenal** reduced cogongrass stems by more than 80 percent—without prohibiting colonization by other species. With the addition of glyphosate and over-planting, above-ground control reached 100 percent after two years. And, **Arsenal** was recognized as "the key factor—with or without glyphosate."

Arsenal® Herbicide Applicators Concentrate (Arsenal AC) (2005)

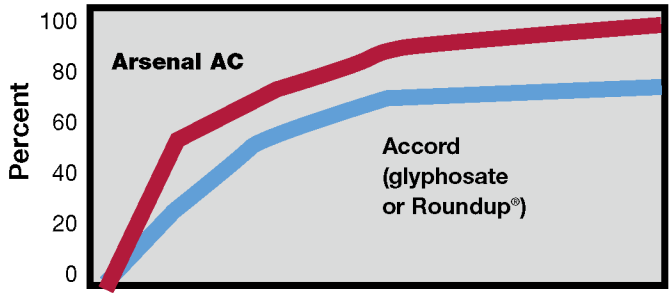
In forestland areas, the selective herbicide **Arsenal AC** has shown to be more effective at long-term control over similar products, such as Accord®.[2]

Cogongrass can be controlled by using broadcast or spot treatment applications of **Arsenal AC** at label rates. Avoid direct application to desired plant species. Injury may occur of desired plant species if they extend from the same root system or their root systems are grafted to those of the treated species, or if their roots extend into the treated zone.

Arsenal AC also fits well into forestry re-vegetation systems—both crimson clover and bahiagrass were found to thrive in areas previously infested with cogongrass that had been treated with **Arsenal AC**.

Increasing Rate Improves Control to a Point

Cogongrass Control – Old Patch
12 Months After Treatment



Arsenal AC	0	8	16	32
Accord	0	64	128	256

Rate in Ounces

Habitat® Herbicide

Cogongrass can grow in and around standing and flowing water, including estuary and marine sites. For these situations, **Habitat**, which is labeled for use on cogongrass in areas where there is surface water, is an effective, long-term treatment.

Effective at very low rates, **Habitat** puts less chemical load on the environment and controls a diverse range of plant species, including a broad spectrum of invasive floating, emergent and woody wetland weeds.

BASF recommendations for terrestrial sites:

• Noncrop Sites: Burn or mow to remove thatch and older leaves, typically in the summer. This helps trigger regrowth from rhizomes, and allows herbicide to be applied only to actively growing leaves. If tillage is feasible, disc directly after burning to further reduce rhizome mass. After one to four months of regrowth, typically during the fall, broadcast apply 2 qts/A **Arsenal** + 1 qt/A MSO.

BASF recommendations for forestry sites:

• Loblolly Pine Reforestation: Treat pre-planting with 24 to 32 oz/A **Arsenal AC** + surfactant. A post-plant treatment of 20 oz/A **Arsenal AC** + surfactant should be applied via directed spray at 10 to 40 GPA in September/October, at the end of the second growing season.

• Broadcast Spray: 16 to 32 fluid oz/A (equivalent to 0.5 to 1.0 lb ai/A). **Arsenal AC** contains 4 lb ai/gal. Use the lower rate when applying to stands of slash or longleaf pine.

• Spot Treatment: 0.5% spray solution by volume.

BASF recommendations for aquatic sites:

• Burn or mow to remove thatch and older leaves, as site allows, typically in the summer. This helps trigger regrowth from rhizomes, and allows the herbicide to be applied only to actively growing leaves. Treat with 2 qts/A **Habitat** + 1 qt/A MSO, applied to new growth.

[1]Faircloth, W., Patterson, M., Teem, D., Miller, J., Cogongrass: Imperata cylindrica - Management Tactics on Rights-Of-Way (Presentation). Auburn University, 2003.

[2]Miller, J., Cogongrass 2005 PowerPoint

ARSENAL® herbicide

Habitat® herbicide

For more information on BASF Professional Vegetation Management products, call **1-800-545-9525** or visit **www.vmanswers.com**.

Always read and follow label directions.

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