BXN 47 - A NEW LOOK AT THE BUCTRIL SYSTEM C. B. Guy G&H Associates Tillar, AR

Abstract

Buctril (bromoxynil) tolerance has been commercially available in varieties that have not performed well in the Mid-South, BXN 57 and 58. Better varieties will be available in 1998, BXN 47 and BG 4740. BXN 47 and BG 4740 are derived from Stoneville 474. Stoneville 474 has proven to be a high yielding variety for many Mid-South cotton growers. In University variety tests, BXN 47 has yielded equal to Stoneville 474. Stoneville 474 is an early season variety with vigorous growth, and responds well to Pix (mepiquat chloride). Stoneville 474 and BXN 47 are not smooth leaf varieties, therefore, proper termination will be needed to prevent trash (leaf content) in ginned lint. BXN 47 is one to two days later than Stoneville 474 and has slightly lower micronaire. Both have sound agronomic traits, but like any variety they will not be perfect for every field or grower.

Weed control with Buctril will be relatively simple because of the high degree of cotton tolerance and the rate flexibility to control many broadleaf weeds at most any size. The maximum labeled rate for each application is 1 pt/A or 0.5 lb ai/A. Buctril at 0.25 lb ai/A will kill a one-two leaf morningglory (*Ipomoea spp.*). Buctril is also extremely effective on cocklebur (*Xanthium strumarium*), smartweed (*Polygonum pensylvanicum*), velvetleaf (*Abutilon theophrasti*), and spurred anoda (*Anoda cristata*). Buctril is less effective on prickly sida (*Sida spinosa*), but with early timing and a rate of 0.75 lb ai/A control is adequate. Pigweed (*Amaranthus spp.*) control with Buctril is poor.

Buctril will need to be applied in a manner that maximizes weed coverage because it is a contact herbicide that is not translocated and has no soil activity. One nozzle over-therow will be adequate on small cotton (<3 inches), but once the cotton gets bigger, two nozzles arranged in sloppy-directed fashion will be best. Buctril tolerance is complete, BXN cotton can tolerate as much as 15 lb ai/A in a single application.

One of the interesting traits of Buctril is that it is fast acting on sensitive weeds. Weeds in sunny weather will be brown the day after spraying. In fact, Buctril works so fast that the weed carcasses dry up and blow away, making evaluation difficult. Because of the flexible application window for Buctril in BXN cotton, it may be possible to eliminate preemergence herbicides like Cotoran (fluometuron) that can damage young cotton. This will work on a limited basis and should not be tried on all of a growers acreage. Eliminating soil-applied herbicides should be a gradual process. With experience growers should be able to manage this practice and use it where it best fits.

A good weed control program using Buctril would be; Treflan/Prowl (trifluralin/pendimethalin) preplant incorporated, followed by Staple (pyrithiobac) preemergence (this will control pigweed, prickly sida and spurge), followed by Buctril postemergence (probably twice), followed by Bladex/Cy-pro (cyanazine) plus MSMA post-directed. Because Buctril has no soil activity, it will be very important to use a residual herbicide underneath the cotton and in the row middles after Buctril is applied.