



Morning glory has covered and lodged the cotton in the untreated area in the right foreground. To the left, cotton treated with monuron is weed-free and makes normal growth.



Monuron

Controls Annual Weeds in Cotton

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In Arizona the amount of cotton treated with herbicides to improve weed control is increasing each year. Growers have found that most annual weeds can be controlled from layby through harvest with an application of the herbicide, monuron, previously known as CMU. The rapid acceptance of monuron is indicated by the 12,000 acres of Arizona cotton treated in 1956, the first year it was recommended.

Where annual weeds are a serious problem in cotton, the cheapest, most effective weed control program combines early season mechanical cultivation with monuron to maintain control after layby. Growers often find the cost of application of monuron (\$5 to \$7 per acre) regained many fold by savings in cultivation and hoeing, by easier picking and by more and better quality cotton.

Earlier Layby

Where monuron is applied to supplement mechanical cultivation for weed control, the date of cotton layby can be advanced. Using monuron, cotton layby is often two to four weeks earlier than where cultivation alone is used to control weeds. Monuron should not be applied, however, before cotton plants are 24 inches high.

Monuron is applied as a spray to the soil. The amount used varies with soil type; usually one pound per acre on light sandy soils and 1¾ pounds per acre on heavy, clay soils. To activate the herbicide, application of monuron must be followed by an irrigation which completely wets the beds. Usually cotton fields are not cultivated after the herbicide has been applied.

A proper application of monuron will control annual grasses and annual broad-leaved weeds such as carelessweed, ground cherry, and morning glory for eight to 10 weeks. Treated fields often remain weed-free for the rest of the growing season. If cotton stands are poor, or if stands are thinned by disease (verticillium wilt or root rot), annual weeds may become established within two months after treatment.

Safe For Cotton

Monuron, used as recommended for the control of annual weeds, has not reduced the yield and has not affected the fiber properties or spinning quality of cotton. Following the application of monuron, cotton leaves sometimes become yellowed. This yellowing is temporary and the leaves regain normal color within three to four weeks.

Where monuron is used in cotton, its effect on the next crop must be considered. If sufficient herbicide remains in the soil it may injure small grains planted after cotton treated with monuron.

DALAPON APPROVED

The use of dalapon to control Johnson grass along ditch banks is an accepted practice by many farmers. The federal government recently approved dalapon for use in cotton. Spot applications of dalapon can replace much hand hoeing for the control of established Johnson grass. Dalapon is applied in water, mixed one pound in five gallons of water. Enough spray solution should be applied to wet grass foliage, about 150 gallons per acre. Usually treatments give the best control when Johnson grass is 10 to 15 inches high and growing vigorously. Retreatment is needed when regrowth is about 12 inches high.

Dalapon is applied to Johnson grass as a directed spray, minimizing injury of cotton. If cotton is sprayed with dalapon, it is temporarily stunted; sometimes, killed. Spot applications may not reduce yield because of increased yield from plants adjacent to stunted cotton. In tests on University of Arizona farms, the fiber properties and spinning quality of cotton were not affected by dalapon.

Dalapon is rapidly inactivated in the soil by leaching and decomposition. There is little danger, where it is used, of injury to crops following cotton. The effectiveness, ease of application, safety for surrounding and following crops, plus low cost indicate dalapon should become increasingly important for the control of Johnson grass in cotton fields.

Monuron applied in cotton has no harmful effect on cotton or grain sorghum grown the next year.

Less Cultivating

Research indicates less cultivation may be required when herbicides are used in a weed control program. Herbicides applied to cotton at the first or second irrigation may remove the need for much of the cultivation formerly believed necessary. To control weeds early in the growing season, a herbicide somewhat safer for cotton than monuron is needed.

(Cont'd on next page)

Learn About Careers In Agriculture

Future Farmers Enjoy UA Visit

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March 29, 1957, was a highlight of the school year for nearly 600 Arizona Future Farmers who took part in the annual FFA Field Day conducted by the College of Agriculture at the University of Arizona.

These farm and ranch boys were selected by their teachers to represent their schools, from a total of 1,850 students in 33 Arizona high schools with departments of vocational agriculture.

They Get a Look at College

The main objective of the full day's program conducted by 10 college departments was to encourage high standards of school work among students enrolled in vocational agriculture. The meeting on the campus also serves to acquaint the visitors with the facilities and personnel of their Land Grant college and the many opportunities to prepare for a ca-

ed. Diuron may be such a herbicide for early season weed control. Diuron is very similar to monuron, but it appears safer for use on short-staple cotton varieties. Diuron also appears more effective for controlling annual grasses.

Good farming practices are an important part of any weed control program. The proper use of herbicides can improve weed control. However, these herbicides must supplement rather than replace good crop rotations and proper crop management. Additional information on herbicides for weed control in cotton will soon be available from the Arizona Agricultural Experiment Station in a bulletin entitled "Chemical Control of Annual Weeds in Cotton."

reer through college work at the university.

The educational activities included judging, demonstrations and tests in the major areas of agriculture taught in high school. These are agricultural economics, agricultural engineering, agronomy, animal production (including meats), dairy production and dairy products, entomology, horticulture, poultry, and soils.

Meats Contest Popular

The meats contest, which includes identification and judging of cuts, was added last year. It is very popular with students. It was conducted this year in the new college meats laboratory at the Campbell Avenue farm. Another new event this year was the judging of soils as to productivity by use of samples, profiles, and analysis data.

Recognition of performance in the various events was given at the awards banquet when certificates of achievement were given individuals and FFA plaques to teams representing their schools. Three levels of excellence—gold, silver and bronze—were used in making the awards.



Meat judging was one of the 10 events at the FFA Field Day this year. The meats judging and soil judging are recent additions to the program.

Large plaques were given to the two schools with the highest total scores in all contests in the program.

The teams with highest scores on dairy and dairy products, livestock, meats and poultry will represent Arizona in the National FFA Judging Contests at Kansas City, Mo., and Waterloo, Iowa, next fall.

They Learn Leadership, Too

While developing abilities in production agriculture, Future Farmers also prepare for leadership through study and practice of public speaking, conducting business meetings and other group processes.

As a part of the program for the day, five teams representing various regions of the state competed in parliamentary procedure.



Cochise County

Wed., 6:55 a.m.—KAWT, Douglas

Coconino County

Tues. and Thurs., 8:10 a.m.—
KCLS, Flagstaff

Graham County

Sat., 10:00 a.m.—KGLU, Safford

Greenlee County

Sat., 10:30 a.m.—KCLF, Clifton

Maricopa County

Mon. thru Sat., 5:55 a.m.—
KRUX, Phoenix
Sun., 8:45 a.m.—KOY, Phoenix

Pinal County

Mon. thru Fri., 12 Noon—
KCKY, Coolidge - Casa Grande

Yuma County

Mon. thru Fri., 7:20 a.m.—
KYUM, Yuma

University of Arizona

Thursday, 9:30 p.m. (Arizona Farm
and Ranch Hour)—
KOY, Phoenix
KTUC, Tucson
KSUN, Bisbee
KYMA, Yuma
KVNA, Flagstaff
KVNC, Winslow
KAWT, Douglas

Television

University of Arizona
Sat., 1:00 p.m. (Across the Fence)
KTVK, Phoenix, Channel 3