BOLL WEEVIL ERADICATION: STATUS AND FUTURE PLANS

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Abstract

The Boll Weevil Eradication Program continues to make good progress. To date, the weevil has been eradicated from more than 3.7 million acres in 9 states. Post-eradication surveillance with pheromone traps continues to protect these areas from reinfestation. Eradication activity is underway on an additional 1.5 million acres, and with referenda passed in Arkansas, Louisiana, and two zones in Texas, further expansion is planned in 1997. A new loan program, the indirect effects of Bt cotton, and increasing emphasis by growers on reducing production costs, should combine to generate new momentum for program expansion and completion.

Introduction

I appreciate the opportunity to be on the program this morning, and to bring you a producer's perspective on the status and future plans for boll weevil eradication. The present day eradication program had its origin in 1958 when delegates to the National Cotton Council's annual meeting forwarded a resolution to develop technology to eliminate the boll weevil as a pest of U. S. cotton. In 1978, technology was evaluated in the trial eradication program in 1978 in northeastern North Carolina and Virginia. Since then, a series of 11 expansions have taken place, and 4 expansion areas now have passed referenda and are set to begin eradication.

Over the years, eradication programs have had their ups and downs, but cotton production without the boll weevil has shown to be the way of the future.

Program Update

As shown in Figure 1, good progress is being made in eradicating the weevil. While the program endured some challenges in 1995, there were successes and significant expansion in 1996. Many growers moved for the first time into a position where they will enjoy the long-term benefits of weevil-free cotton. Others continued to enjoy the benefits, or profits, from their earlier investment in the program.

The weevil has been eliminated from areas shown in dark colors in Figure 1. Most of the acreage is in the Southeast and Southwest. Nationwide, over 3.7 million acres are now weevil-free. This means that an additional 7 million acres in the Mid-South, Texas and Oklahoma remain infested with the boll weevil.

Active eradication programs, shown in light gray in Figure 1, are currently operating on about 1.5 million acres in portions of Alabama, middle Tennessee, and three zones in Texas.

Post-Eradication - Southeast

Eradicated areas in the Southeast continue to look good. More than 3.2 million acres are now weevil-free in the Southeast (Figure 2). Growers report sharply decreased insect control costs and higher yields. Dramatic acreage increases have resulted. The local reinfestations from 1995 have been cleaned up. Surveillance procedures have been tightened and an educational program has been implemented to minimize future reinfestations. In the largest reinfestation in South Carolina, reproduction was confined to less than a dozen fields by season's end. The weevil should be eliminated next spring. Georgia and Florida are essentially weevil free.

Post-Eradication - Southwest

Eradicated areas (Figure 3) in the southwest remain in great shape. A single boll weevil was detected west of Phoenix, but not one drop of pesticide was applied for boll weevil on more than 1.5 million acres of cotton in Arizona, California, and northwest Mexico.

Eradication Areas - Southeast

Figure 4 shows status of southeastern boll weevil eradication programs. An effective series of program treatments in the fall of 1995 were followed by a very cold winter. This combination resulted in significant savings in time and resources in the Alabama program. North Alabama is just about done, with only 10 percent of the fields needing treatment last fall. And adjacent areas of middle Tennessee should be weevil-free this season. Work units have been consolidated as the program nears completion and moves into its post-eradication phase. Weevil migration from Mississippi remains a concern. Fortunately, growers representing 70% of the acres in the terminated east Mississippi zone volunteered to pay the assessment to maintain a modified suppression program last year. Growers in this region of Mississippi are presently voting to reconsider the benefits of the program. As a matter of fact, ballots are to be returned today.

Eradication Areas - Texas

The Texas Southern Rolling Plains (SRP) eradication zone, shown as the middle zone in Figure 5, is making good progress after its second full season. Boll weevil populations have been reduced by 98 percent compared to 1995. Growers in this zone chose to modify the program so they could use 2 alternate chemicals for mid-season control of boll weevils.

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Two new zones in Texas totaling about 1.3 million acres started eradication with treatments in the fall of 1996. The South Texas/Winter Garden (SoTex/WG) area, the lower zone in Figure 5, and the Rolling Plains Central (RPC), the upper zone, both got off to a good start.

Expectations for 1997

There are several issues on the horizon for the 1997 season (Figure 6). Two areas of immediate concern are New Mexico and the Texas High Plains. Based on extensive trapping during 1996, it appears that much of the 70,000 acres of cotton in New Mexico may now be weevil-infested. It is important that growers proceed with their plans for eliminating the boll weevil from New Mexico before it gets firmly established. In the High Plains of West Texas, weevils were trapped in every cotton county for the first time in history. Following successive mild winters and improved hibernation conditions, the weevil slipped in and got a toe-hold. Nearly 2.5 million acres are in danger of becoming generally infested. Nevertheless, some growers are challenging the Texas eradication program in the courts.

Another issue that bears close monitoring in 1997 is the indirect impact of Bt cotton on weevil eradication. Without worm treatments, boll weevils are becoming a more visible problem in many areas. As a result, growers must now evaluate the benefits of eradication in light of Bt cotton. Producers cannot take full advantage of Bt cotton with the boll weevil remaining as a principal pest.

Something else that is exciting for 1997 is a new loan program from the Farm Service Agency (FSA). Rulemaking is now underway with first loans expected to be available this spring. As much as 34 million dollars may be available under this new program. This will finally provide growers an alternative funding mechanism where our regional or state organizations can help to spread out the cost of weevil eradication. These loans may also provide the funds needed to respond to any emergency in previously eradicated areas.

As we move into 1997, we also expect to see renewed momentum for eradication. More than 1.3 million acres started the process of eradication in 1996. These new areas and other areas presently under active eradication are shown in light gray in Figure 7.

The areas shown in dark color in Figure 7 will begin this year. Growers in west Louisiana passed a referendum in December and now will join growers in southwest Arkansas, who passed a referendum last March, in a fall 1997 startup. Also, the St. Lawrence area of West Texas will start its program later this year.

Referenda in three zones in Mississippi, shown in dark color in Figure 8, will conclude today and results will be known within the next few weeks. If the referenda are approved, plans are for at least two of the three regions to begin in the fall of this year. A referendum will be conducted in southwest Tennessee in mid-February and growers in other states will probably vote this year to determine their future involvement in eradication.

Summary

In closing, these are exciting and challenging times for boll weevil eradication. The challenges of 1995 were followed by successes in 1996. The state of Alabama and the Texas Southern Plains have nearly completed the eradication phase.

This year we will see significant new expansion into west Louisiana, southwest Arkansas, the St. Lawrence area of West Texas, and hopefully, Mississippi. New loans from FSA should become available to boll weevil programs in the next two or three months. Additional areas will likely vote later this year.

Risks of secondary pest outbreaks are a concern, especially during the first full year of operation. However, things are now in place to lessen the risk. More grower flexibility has been built into the program and malathion use rate has been cut. Bt transgenic cotton is now available, and Confirm and Pirate, new products for worm control, were available through the Section 18 process last year and hopefully will also be in 1997. Tracer, a new worm product from DowElanco, is likely to be registered soon.

Weevil eradication has become a reality for growers on more than 3.7 million acres. It is a proven program. If you are still battling weevils and your area is thinking about an eradication program, I urge you to get information firsthand from growers who have been through it. Get the facts. Boll weevil eradication has been and always will be a grower-run and a grower-funded program. From day one, USDA APHIS has been a valuable partner in operations, coordination and funding of the eradication effort. However, future programs will have minimal USDA APHIS involvement in operations.

The Boll Weevil Action Committee recognizes that boll weevil eradication comes with challenges, debates and controversy. But cotton producer leadership has a commitment to move forward because elimination of the weevil represents the grower's best chance for long-term stability and profitability. The benefits are significant and are long-term. Growers are now facing increased pressures to reduce production costs. Elimination of the boll weevil means increased yields, lower production costs, and IPM opportunities because of reduced insecticide use. Eradication puts money in the pockets of growers who are willing to make the investment.

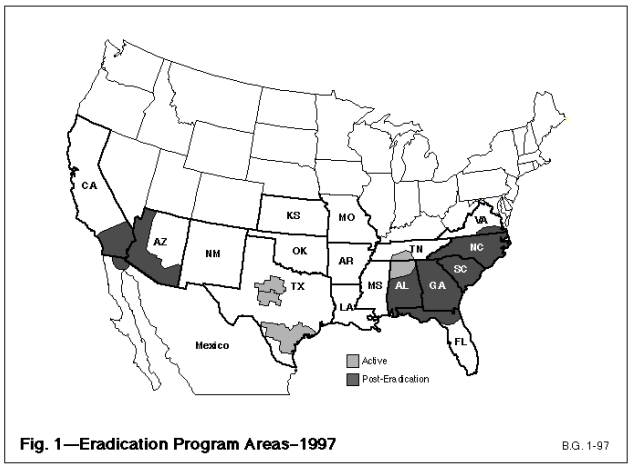

Fig. 1—Eradication Program Areas–1997 B.G. 1-97

Fig. 2—Post-Eradication Areas *Southeast*-1997 B.G. 1-97

Fig. 3—Post-Eradication Areas *Southwest*-1997 B.G. 1-97

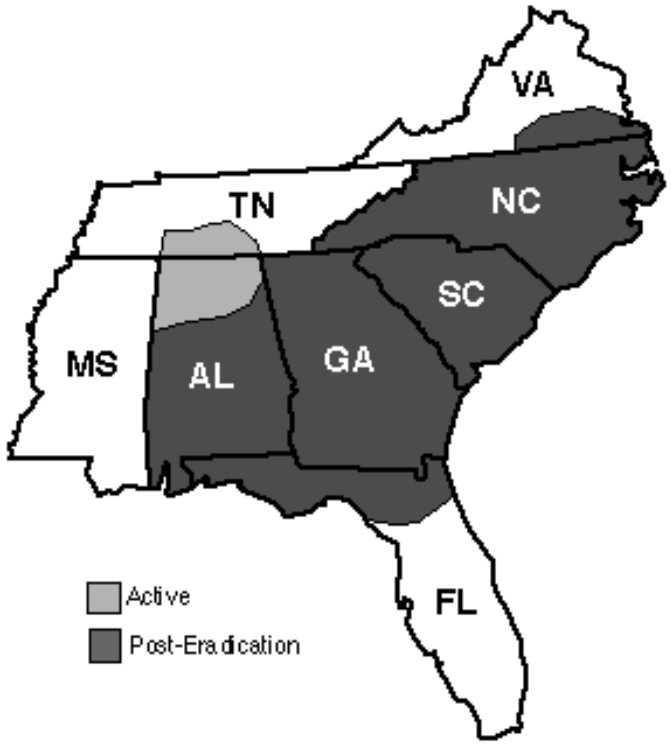

Fig. 4—Eradication Areas *Southeast*-1997 B.G. 1-97

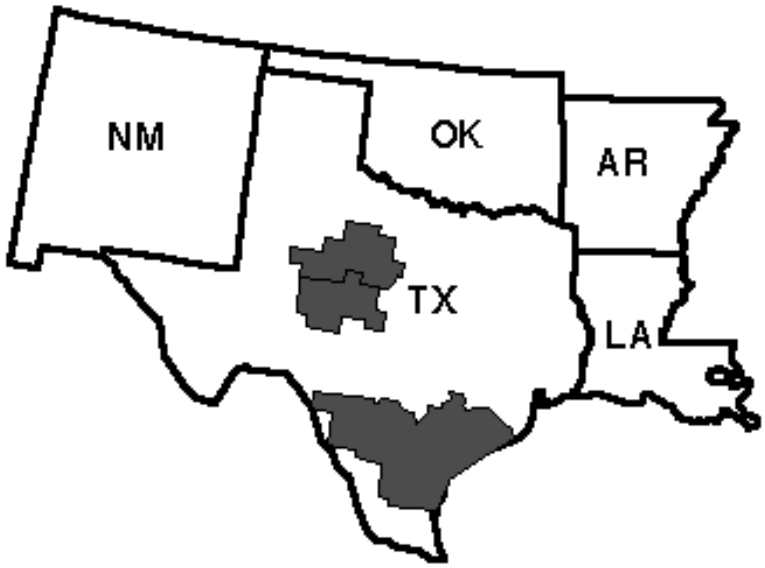

Fig. 5—Eradication Areas *Texas*-1997 B.G. 1-97

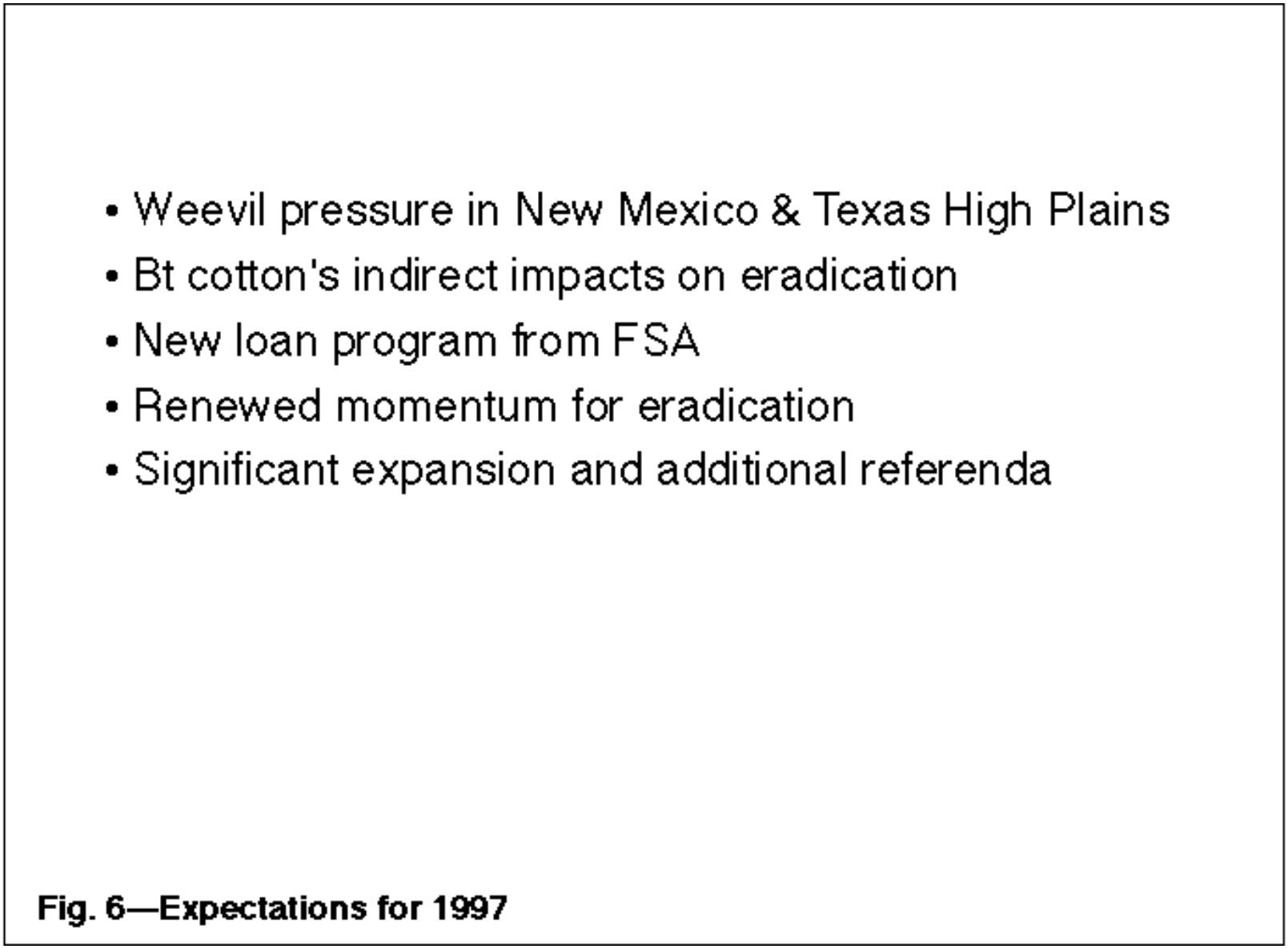

Fig. 6—Expectations for 1997

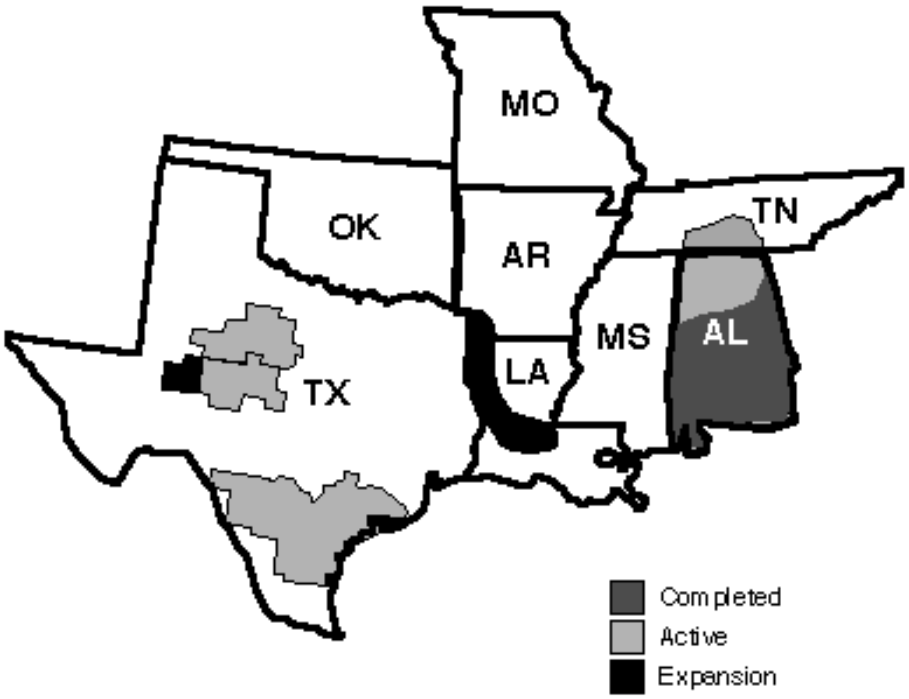

Fig. 7—Expansion Areas–1997

B.G. 1-97

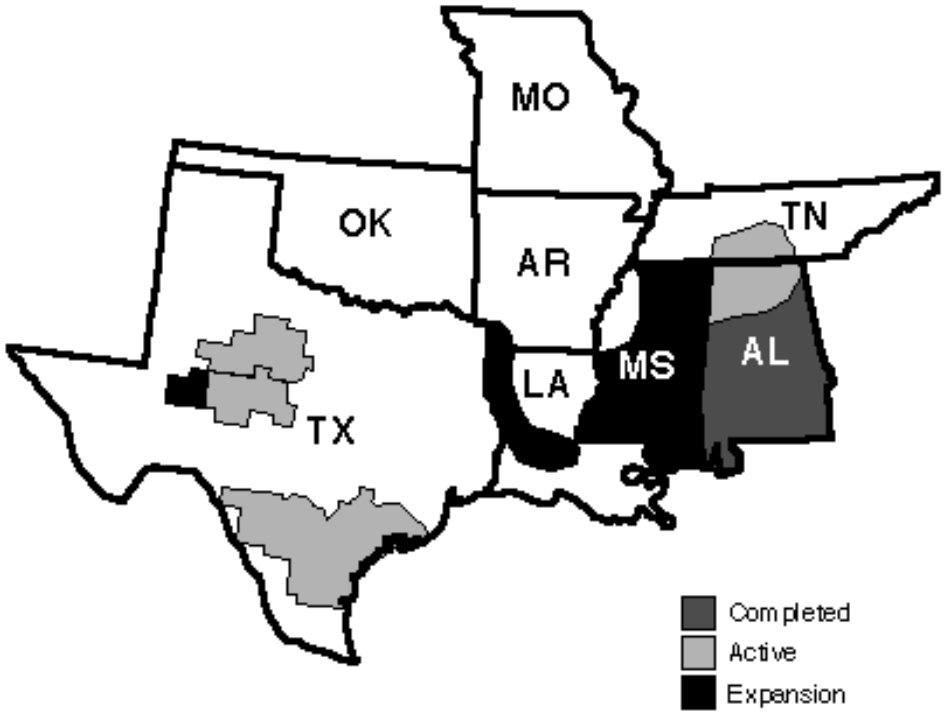

Fig. 8—Expansion Areas–1997

B.G. 1-97