

Cotton grower Arledge believes that farmers who do not keep pace with technical progress are lost

I F EVER a cotton farm bore witness to the advantages of fertilizer and other chemicals for agriculture, it is the W. A. Arledge and Son Farm in Natchitoches Parish, La. In 1955, just before the Arledges took over the land, it produced 0.25 bale per acre (overall parish average is slightly better than 0.75 bale per acre). Last year this same land made 2.3 bales per acre, estimates Wear Arledge, Jr., who manages the farm.

Arledge acquired his present farm in the winter of 1955, when he leased 550 acres of cultivated land from the Cane River Land and Cattle Co. The farm is situated on the bank of the Cane River near the small town of Lena, La. Arledge had 218 acres in cotton last year and the remainder in small grain crops such as oats and milo. During his first year there he also had 185 acres in corn, but discontinued it because the crop was "too unpredictable."

Soil Best for Cotton

His Cane River soil is among the best for growing cotton, thinks Arledge. But when he acquired the land, it was evident that it had not received proper care. His first task was to break the land with a disk plow to a depth of 12-14 inches. This removed the weeds and grass seeds. Without the aid of a soil analysis, in 1956 he applied 80 units of nitrogen (as anhydrous ammonia) and 300 lb. of 0-20-20 per acre. At that time, state recommendations for the area were 60 units of nitrogen and 60 lb. of potash. Arledge's first cotton crop averaged 1.75 bales per acre.

In the fall of 1956, Arledge began having soil analyses made by the state laboratory (he takes his own samples). As a result, he stopped using phosphate. Nor does he use lime, since none is needed. In 1957 he increased his fertilizer applications to 120 units of nitrogen and 100 lb. of potash, although state recommendations were only 80 units and 60 lb., respectively.

Exceeding fertilizer recommendations is the rule with Arledge. He believes that recommendations are based upon ideal conditions, which seem never to occur. Extra available nitrogen, he adds, will help carry over a crop during a dry spell. And, says Arledge, with additional nitrogen he can set a crop of cotton while the stalk is still growing. This is contrary to state thinking, he points out.

Early Season Control

Wear Arledge was one of the nine Louisiana cotton growers who participated in the 1957 Hercules demonstration to test toxaphene-DDT sprays on "resistant" boll weevils and other cotton pests. By using a two-to-one mix (40% toxaphene and 20% DDT) and following Hercules' recommendations for early season control, he obtained excellent results. He is sold on the program and plans to continue using it.

Wear Arledge increased cotton yields by a factor of 10 in three years



Actually, Arledge had practiced early season control with toxaphene as early as 1956. However, as a result of the "resistant weevil" scare, he switched to methyl parathion. Arledge obtained good control with this insecticide but, he notes, at greater expense. With toxaphene-DDT, he starts his early season control program about the middle of May. This rids the cotton of hibernating weevils and flea hoppers. He uses either a fiveor seven-day spray cycle.

Firm Believer

Arledge is a firm believer in agricultural chemicals. Defoliants and herbicides, he finds, help him reduce his labor requirements to a minimum. Together with two full-time laborers, he applies all fertilizer and chemicals himself. Only when field conditions force him behind schedule does Arledge resort to aerial application. He hires additional labor as needed to take care of weeds and grass which herbicides may miss.

When he first moved to Lena, says Arledge, labor was relatively inexpensive. Now that labor costs are rising, he is striving to make his farm operations as completely mechanical as possible. Included among his more than \$60,000 worth of equipment are five 4-row tractors, two mechanical cotton pickers, a combine, two flame cultivators, and a mechanical sprayer.

Arledge feels that the farmer who does not read and talk, who does not keep abreast of technical progress, is "dead." Arledge gets much of his technical information by touring experiment stations and farms in Louisiana and Mississippi. He also attends as many technical meetings as possible. But he makes his own decisions based on the information he obtains. For instance, when he goes to his dealer to buy fertilizer, he knows in advance exactly what he wants. He does not have to rely on the dealer's judgment. Arledge does, however, follow as closely as possible manufacturers' dosage recommendations.

No Ideas from Neighbors

His immediate neighbors offer Arledge very little in the way of ideas. According to him, they farm exactly as their grandfathers did before them, and have no interest in progress. When they saw his first successful cotton crop, they called it "luck." After three seasons of good yields, however, they are beginning to think differently, says Arledge. Despite the 500 bales made on his 218 cotton acres last year, all was not well with Arledge in 1958. Extremely wet weather (14 straight days of rain in September) hampered picking. Much of the cotton simply rotted in the field. Consequently, he was able to gather only 250 bales. About half of this he sold for 36–37 cents per pound. The remainder brought only 25 cents.

Branching Out

This year Arledge does not intend to put all his eggs in one basket. He has leased additional land, and is stocking part of it with 400 head of cattle. With the remaining land, he will increase his cotton planting to about 388 acres. Of his original 218 cotton acres, he plans to put 10%into soybeans under the Government's A Plan. Thus the crop will be supported at not less than 80% of parity.

Arledge has farmed just about all his life. In addition, he attended Northwestern State College at Natchitoches for two years. Once, says Arledge, he thought he knew how to farm. Now he is convinced that he will never know all there is to farming, since he has found that one never stops learning.

Announcing— 5th Decennial Index to Chemical Abstracts

A nineteen volume index to chemistry and chemical engineering for the years 1947 to 1956, covering 543,064 Abstracts of Papers, 104,249 Abstracts of Patents, keyed by Authors, Formulas, Subjects, Patent Numbers, Organic Rings

An expediter of progress in an age when nothing is os expensive as time.

Accurate • Comprehensive • Autho	oritative • Consistent
Prices per set	
*ACS Members	\$ 500.00 per set
*Colleges & Universities	\$ 600.00 per set
All Others	\$1200.00 per set

(\$15.00 additional foreign postage) *Sold under special lease agreement.



Get Season Long Protection with **CHEM-BAM** The ONLY 100% Proven Effective Fungicide For Blight* Protection

Scientific proof from leading agricultural college at its vegetable research farm—plus on-the-spot farm tests have successfully demonstrated CHEM-BAM'S 100% protection for better quality crops and higher yields.

CHEM-BAM is used for vegetable disease prevention through the United States, Canada, Cuba and South America. It's the new, improved agricultural liquid spray with the exclusive U-101.

Check these features . . .

- $\label{eq:chem} \textbf{CHEM-BAM} \dots \text{ the only fungicide that gives } 100\% \text{ protection against blight.}$
- **CHEM-BAM**... can't damage plant tissues. Perfectly safe at all times.
- CHEM-BAM... with exclusive U-101, sticks to plants through rain and repeated watering ... can't wash off.
- CHEM-BAM... insures full-size, healthier, luscious-looking vegetables. *potate blight

For further and more complete details phone or write

CHEMICAL INSECTICIDE CORPORATION

30 WHITMAN AVENUE . METUCHEN, NEW JERSEY . LIBERTY 9-2300