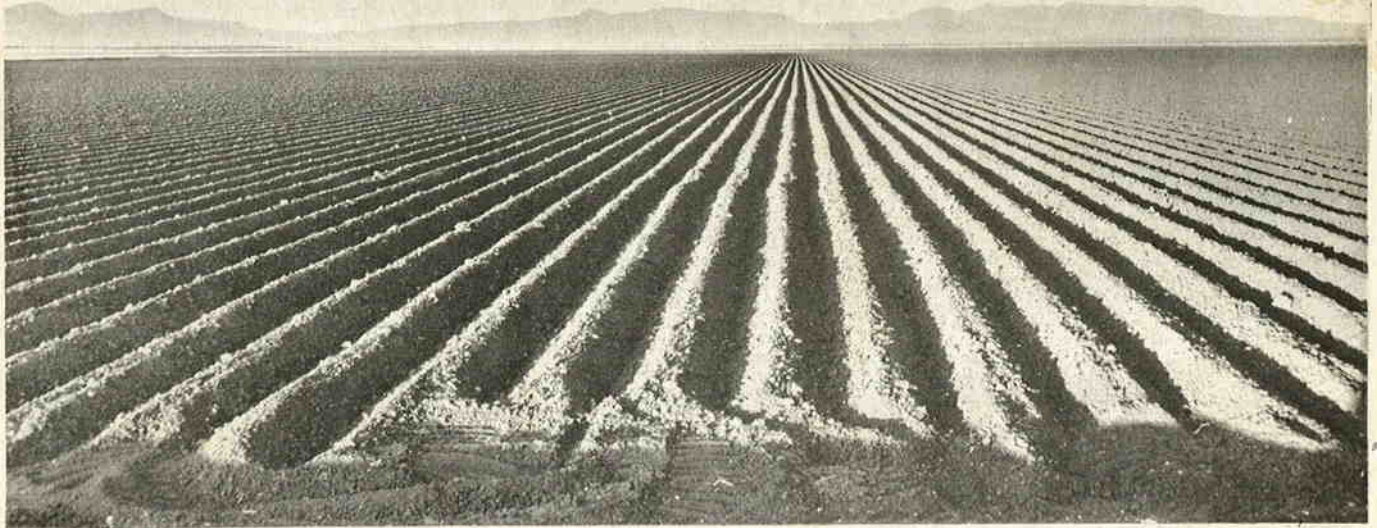


A TYPICAL FARM — READY FOR SOWING



This dramatic photograph, by Bruce Dunnet of the North Western Courier, Narrabri, shows the amount of survey and engineering required to achieve correct gradient for flood irrigation. Note also that the uniform furrows have been farmed to a depth of about 12 inches to carry irrigation waters from the watering canal to the tailwater channel.

AERIAL SPRAYING IS VERY COSTLY

As the young plants grow, the farmer must tend them carefully. At all stages, the plants are susceptible to attack by insects and other pests, and crops are continually sprayed against these attacks. Farmers on smaller holdings favour tractors using boom sprays, while on larger farms aerial spraying proves more practical.

Spraying, however, is a very costly process, and the cost of spraying 5000 acres would be about \$15,000 (£7500) for each application.

Here again, frequency of applications varies, and while some growers spray when crop checks indicate necessity (and this may be seven or eight times through the growing period) others programme spray every seven to ten days.

Several farms have constructed their own airstrips—particularly larger holdings where it may be necessary for aircraft to take on additional fuel or chemical to complete a spray programme.

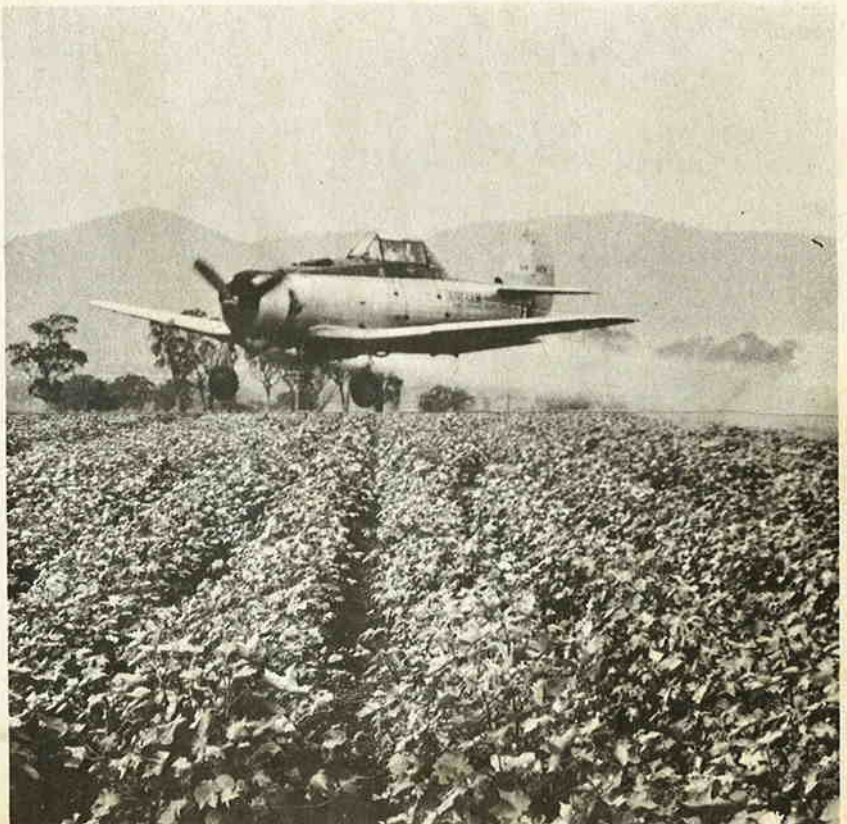
Many prefer to have spraying programmes carried out by night, as winds and high local summer temperatures would greatly reduce the efficiency of daytime spraying.

Spraying a 5000 acre plot each ten days from say November to February proves very costly—approximately \$30 (£15) per acre is spent on insect control.

Major pests in the area are Heliothis (controlled by DDT) and Rough Boll Worm (controlled by ENDRIN), and these chemicals form the basis of present control programmes.

Minor pests which can also inflict damage include cutworms, aphids, mites, tip borers, and thrip.

OPERATION "PEST CONTROL"



Although aircraft of all shapes and sizes have been used in the all-important task of keeping the cotton crop free from insects and pests, the tiny Pawnees have proved most suitable to local conditions. Their large payload and economic operation have caused their popularity with local crop dusting pilots.

THE NEXT HURDLE IS WEED CONTROL

The next problem to confront the farmer is control of weeds.

Apart from aiding the growth of the cotton plants, the intensive irrigation also causes weeds to flourish.

Unless controlled, the weeds compete with the cotton plants for plant food and moisture, and in severe cases could choke the cotton plants.

Weeds therefore would reduce yields unless removed. They would later interfere with mechanical picking of the crop, and cause loss of quality and grade.

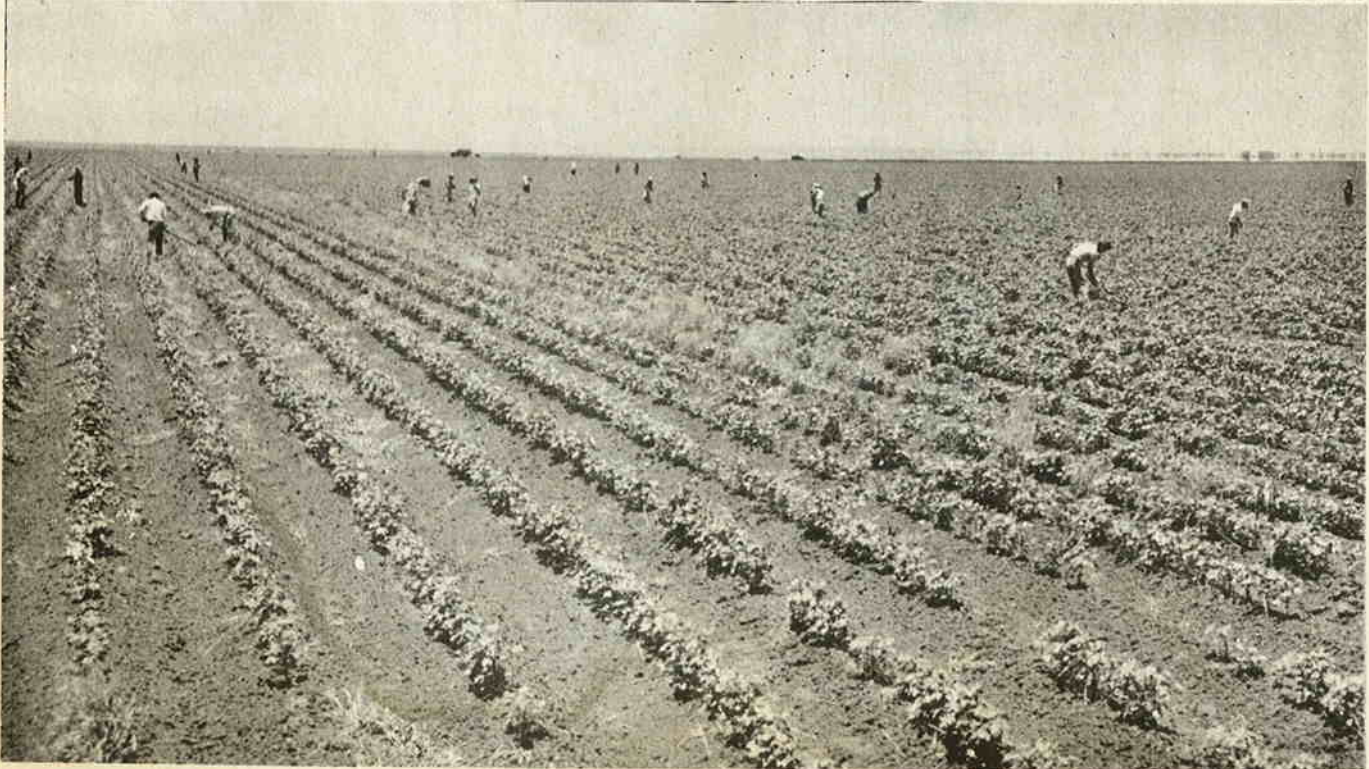
Weed control is greatly assisted by the use of chemicals, Diuron, Trifluralin and Prometryne proving effective.

Chemicals alone, however, cannot completely overcome this problem.

Chemical control is supplemented by inter-row cultivation with tractor-mounted cultivators, and finally, hand chipping has also proved essential.

Weeds are particularly severe in first crops on new ground, but continuous farming and crop growing reduces the nuisance appreciably.

The industry employs a veritable army of seasonal workers who are paid around 10/- per hour, and from November to February teams of men (and women) may be seen working in the cotton fields from daylight to dark, seven days per week, removing weeds growing close to or interwoven with the cotton plants.



Part of the vast army of seasonal workers who visit the Narrabri-Wee Waa area each year between November and February are seen above on the mammoth task of keeping the crop free from weed growth. In the top scene are executives from the Bradford Spinning Mills inspecting a crop in flower. At this stage of the growing cycle, the crop's yield can be estimated with reasonable accuracy.