

treatment after delinting. This was true with all four of the varieties in this test. Our interest in this trial was on seedling disease only, and no attempt was made to determine the degree or extent of insect control by the granular addition.

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SOUTHWESTERN COTTON RUST

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Cotton rust brought about lowered yields on many fields in parts of Pima, Santa Cruz and Cochise counties. It was present, probably without damage to yield, in Graham, Greenlee, Pinal and Yuma counties. Out-of-state reports of rust were received from the El Paso area, southwestern New Mexico and northern Mexico.

In our report last year we mentioned that we had found plants with an appreciable degree of rust resistance within certain species and in interspecific crosses in the genus *Gossypium*. Backcrossing of these resistant plants of interspecific background has been done with Acala-type breeding lines or varieties. Through the use of greenhouse inoculation techniques we accumulated a considerable mass of resistant breeding material for field testing in 1968. Field plantings of such material were made at four locations in southern Arizona in 1968, and we were fortunate in having natural development of cotton rust at all locations. A very encouraging degree of resistance to rust was apparent in many of the lines and numerous plant selections were made. Laboratory tests on fiber and boll properties are being made.

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EFFECTIVENESS OF CROP ROTATION AND FALLOW LAND TREATMENT IN COTTON ROOT-KNOT NEMATODE CONTROL

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A crop rotation and fallow land treatment for the control of the cotton root-knot nematode in a sandy textured field is still in progress in Pinal County. To summarize: the field was planted to Deltapine Smooth Leaf cotton