



SUMMARY

Disease Surveys.

*The incidence of bacterial blight on seedlings early in the season has declined dramatically and this has been reflected in recent seasons by lower levels of blight on bolls prior to harvest.

*The incidence of verticillium wilt in the area between Narrabri and Merah North in the Namoi Valley has increased significantly over the last five seasons. Survey results indicate (i) a positive relationship between repeated cotton cultivation and the incidence of verticillium wilt (ii) that rotations being used in the Namoi Valley are having little effect on the incidence of the disease and (iii) there is no clear relationship between the amount of debris from a previous cotton crop and the incidence of verticillium wilt.

*Phytophthora boll rot was widespread in the 1987/88 season in association with heavy rainfall in late February and March 1988.

*Black root rot was recorded for the first time in Australia and has now been detected at four sites.

*Significant populations of plant parasitic nematodes were not detected in irrigated cotton soils with a long history of cultivation.

*Alternaria leaf spot was recorded for the first time in commercial cotton fields in New South Wales.

*Premature senescence has been observed in many commercial crops. Some evidence suggests that the condition results from a natural relocation of nutrients from the growing point of the plant to the developing bolls.

Seed scheme to reduce blight infestation of planting seed

*There has been a substantial reduction in the level of bacterial blight infestation of planting seed.

*Assessments of blight incidence have been used as a criterion for rejecting pure seed crops.

*Blight susceptible lines in C.S.D. nurseries have been sprayed with Kocide to prevent/reduce the development of blight epidemics.

*Preliminary results indicated that using a bactericide in picker water may reduce the dispersal of the blight pathogen during picking and ginning.

*An experiment showed that the level of seed infestation declined more rapidly if seed was stored delinted than if stored fuzzy.