

*lora* L. and *C. occidentalis* L., in nature. The bacterium that we have intercepted did not produce disease symptoms on these primary hosts. Therefore the symptoms we have described appear to be caused by a pathovar of *X. campestris* (Pam.) Dowson.

Laboratory investigations carried out to eradicate seedborne inoculum have shown that dipping infected seeds in hydrogen peroxide (30%), alone and in combination with streptomycin (1000 ppm), gave complete control of the bacterium without affecting germination.

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## References

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## Botrytis Gray Mold Epiphytotic of Chickpea in Nepal

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A severe epiphytotic of botrytis gray mold (*Botrytis cinerea* Pers. ex Fr.) occurred on chickpea in the Terai region of central and western Nepal in the 1987/88 season. In late March 1988, we visited seven experiment stations and farmers' fields at three locations to estimate probable yield losses from the disease (Table 1).

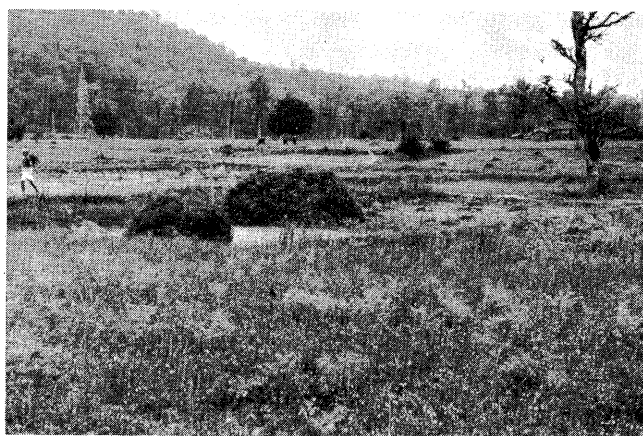
The highest levels of disease and the most severe damage, with up to 100% yield loss, were found on experiment station crops, perhaps because these have high plant populations, with dense canopy and high humidity, which foster incidence and severity of the disease, whereas farmers' crops have low plant populations and poor vegetative growth (Fig. 1).

If chickpea yields are to be improved in Nepal, it is essential that farmers should increase the plant population and improve inputs to encourage better growth of their crops. However, this may lead to increased levels of botrytis gray mold attack unless canopy effects on the crop microclimate can be

**Table 1. Visually estimated yield losses due to botrytis gray mold in chickpea on research farms and in farmers' fields in Nepal, 1987/88.**

Location	Site	Yield loss (%)
Central region		
Hardinath	Research farm	100
Bellichapi	Research farm	80
Parwanipur	Research farm	80
Nawalpur	Research farm	50
Midwestern region		
Bhirahwa	Research farm	50
Udarapur	Farmers' field	20
Mankamanapur	Farmers' field	15
Nepalganj	Research farm	25
Western region		
Rampur	Research farm	80
Shivpur	Farmers' field	10

modified. We suggest that compact genotypes with upright growth habit be tried, and the planting pattern be modified; for instance, by increasing interrow spacing and decreasing intrarow spacing to maintain optimal populations yet prevent undue humidity within the crop canopy.



**Figure 1.** A farmer's chickpea field 20 km west of Navapur in central Nepal, showing very poor stand and many weeds. The weed with white flowers is *Leucas aspera*; it was infested by root-knot nematodes (photo from Dr. H.A. van Rheenen).