negative correlation (-0.77) between percentage of flowers damaged and seed yield. These findings indicate that as the number of flowers damaged by *B. cinerea* increased, the number of pods formed and seed yield decreased. The line CP(L) 4 from Rampur, Nepal, with the lowest percentage of flower damage (13%), produced the maximum number of pods plant^{-1} (58) and the highest yield (1375 kg ha^{-1}). In contrast, the line CP(E) 61, with 71% flower damage and only 24 pods plant^{-1} was the lowest-yielding line (65 kg ha^{-1}). Similarly, the line ICC 3208 with maximum flower damage (73%) also had low pod formation (25 pods plant^{-1}) and poor yield (130 kg ha^{-1}). In this test, the lines CP(L) 4, CP(E) 10, and ICCL 82108 were found to have low gray mold incidence with fairly good yielding ability. Lines CP(E) 31, ICCL 81215, and ICCC 4 have field tolerance to this pathogen, as indicated by good yields despite the high incidence of flower infection.

The results of this study clearly show that botrytis gray mold is a limiting factor in chickpea production in Nepal. Multilocation tests must be carried out in order to find sources of durable resistance to this pathogen. Also, economical and effective chemical control methods must be devised to minimize the yield loss caused by this disease.

Further Screening of Chickpea Genotypes for Ascochyta Blight Resistance

S.K. Khirbat[1], Hari Chand[1], B.L. Jalali[1], Jagdish Kumar[2], and Y.L. Nene[2] (1. Haryana Agricultural University, Hisar, Haryana, India; 2. ICRISAT)

In continuation of our earlier efforts to screen chickpea genotypes for ascochyta blight resistance (Jalali et al. 1983), we tested a wider spectrum of materials, drawn from different segregating generations. Earlier testing had identified seven moderately resistant lines (with a score of 3.00) among the 150 tested (Jalali et al. 1983). To identify more sources of resistance, about 2000 F_3 and F_4 progenies from ICRISAT were evaluated during two crop seasons, 1983/84 and 1984/85, under artificial epiphytotic conditions at Haryana Agricultural University, Hisar.

The test lines were sown on 30 October in both years (1983 and 1984) in 2.5-m rows spaced 40 cm apart. An infector row of PB 7 was sown after every two test rows. Diseased debris collected in the previous season was chopped and spread in the field during the second week of December. Later, in the first week of February, late afternoon, when the temperature was around 20°C, the crop was sprayed with a spore suspension of *Ascochyta rabiei*, approximately 30 000 spores mL^{-1}. High humidity in the blight nursery was maintained with perfo irrigation daily from 1100 to 1400 for 2 weeks after the inoculation. Disease reactions were recorded twice (30 d after typical disease symptoms appeared, and at harvest during late April).

The first disease symptoms appeared 6 to 8 days after inoculation with the spore suspension. Within a couple of days thereafter, the susceptible control showed almost 100% mortality. Disease reactions were rated on a scale of 1-9 (Singh et al. 1981).

Of the more than 2000 chickpea progenies tested, 35 derived from 12 crosses were moderately resistant in both crop seasons, with a score of 3.00 (Table 1).

Table 1. Chickpea breeding progenies with ascochyta blight score of 3.00 (on a 1-9 scale) at Haryana Agricultural University, Hisar, Haryana, India, 1983/84 and 1984/85.

Cross number	Parents
ICCX 830408	HMS 6, GL 769, NEC 138-2
ICCX 830602	ICC 1069, G 588
ICCX 830611	ICC 607, H 75-35
ICCX 830445	G 130, K 1189, ILC 72
ICCX 830454	P 2426-1, K 1170, ILC 72
ICCX 830455	P 2426-1, K 1170, ILC 3279
ICCX 811174	BG 209, ICC 3718, ILC 72, Pant G 114
ICCX 811176	BG 209, ICC 6934, ILC 72, Pant G 114
ICCX 811 177	BG 209, ICC 10495, ILC 72, Pant G 114
ICCX 811 184	Pant G 114, ICC 3718, ILC 72, BG 209
ICCX 811 186	Pant G 114, ICC 6934, ILC 72, BG 209
ICCX 810623	L 550, *C. reticulatum*, K 850

The testing program is continuing with a still wider range of chickpea genotypes drawn from several sources.

References

Jalali, B.L., Khirbat, S.K., Sangwan, M.S., and **Sethi, S.C.** 1983. Testing chickpea genotypes for resistance to Ascochyta blight. International Chickpea Newsletter 9:18-19.

Singh, K.B., Hawtin, G.C., Nene, Y.L., and **Reddy, M.V.** 1981. Resistance in chickpea to *Ascochyta rabiei*. Plant Disease 65:586-587.