

cycles required for floral initiation are underway.

- S.C. Sethi (ICRISAT).

Off-Season Plantings, ICARDA

Growing two generations per year is important to the progress of chickpea breeding programs. Preliminary trials were conducted by ICARDA at three West Asia locations in 1978, and the crop was satisfactory at all locations when planted in June. In the summer of 1979, 2 ha were planted at Terbol, Lebanon, during the last week of June, and a satisfactory crop of the breeding material was produced.

- K.B. Singh (ICARDA).

Off-Season Plantings, India

ICRISAT grew 1 ha of breeding material during the summer of 1979 at Taparwaripura, Kashmir. The site and planting time were chosen on the basis of 3 years' tests at several locations. The crop was satisfactory, maturing in time for planting in mid-October at ICRISAT Center, thus giving us two generations in a year.

- C.L.L. Gowda (ICRISAT).

Male Sterility

Two naturally occurring male-sterile plants were noticed in the F₂ population of Annigeri × PM-L-550 during 1976-77 season. Crossing these plants with G-130 (the only cultivar flowering then) resulted in pod set. The F₁ was fully fertile and meiosis was normal. Inheritance of this character is being determined by growing F₂ and F₃ generations. Cytological and embryological studies on male-sterile plants to investigate the cause(s) of sterility are planned. Preliminary observations in the F₂ indicated that male sterility was partial, and segregation was not clear cut.

- S.C. Sethi (ICRISAT).

Physiology/Agronomy

Winter Planting

In the Mediterranean region of West Asia, North Africa, and South Europe, chickpea is

grown as a spring-sown crop. Preliminary screening of 200 lines in Lebanon in 1974-75, and more recently of over 3000 germplasm lines at Tel Hadia (Syria) and Terbol (Lebanon) in winter plantings, indicated that chickpeas could survive the severe cold weather and give much higher yields than the succeeding spring-sown crop.

The main threat to the winter-planted chickpeas was the damage by blight (*Ascochyta rabiei*). This disease could be controlled by fungicides, but the safest and cheapest control would be by genetic resistance.

The advantages of winter sowing are (a) higher yields resulting from better moisture availability and a longer growing season, and (b) the opportunity to extend chickpea culture to areas of lower rainfall than is required for the spring-sown crop.

With the identification of a number of lines with some resistance to blight, we have initiated the Chickpea International Yield Trial - Winter, and seed has been furnished to 15 locations in eight countries. Two of the most promising lines are being tested in farmers' fields in Syria.

- K.B. Singh and G.C. Hawtin (ICARDA).

Survival of Desi Chickpeas in the Population of Kabuli Landraces

In most of the countries of West Asia and North Africa, the kabuli landraces of chickpea are cultivated. Often in the field population of these landraces, a few plants having pink flower are found. The number of these desi types is generally very small, often not exceeding 1 percent of the total population. Since there is a well-known human preference for kabuli types in the region, it is surprising that the desis should have survived in these populations.

An opportunity to look into the question of the existence of desis in the predominantly kabuli chickpea populations presented itself accidentally when a field trial planted in 1979 spring season with 'Lebanese Local' landrace of chickpeas at Terbol in the Beqa, a valley of northern Lebanon, showed very poor emergence because of the suboptimal soil physical conditions at the time of planting. This abandoned trial attracted attention when the emerged plants reached flowering stage and showed an unusually high proportion of pink-flowered plants in the population. Actual counts on 20 plots of the experiment are given in Table 1.