Sterility-Mosaic Resistant Lines of Early-Maturing Pigeonpea Developed at ICRISAT

Sterility mosaic has become a serious problem in several pigeonpea-producing areas of India such as Bihar and Uttar Pradesh. Although it has not yet become a serious problem in the areas where early pigeonpeas are grown in rotation with wheat, its high-frequency presence in western Uttar Pradesh indicates the possibility that it can spread to the early-pigeonpea areas of Haryana, Punjab, and Rajasthan. With this as a possible future problem we started looking for sterility-mosaic resistance in early pigeonpeas. Pant A-3, a line from Pantnagar, has already been reported as being resistant to sterility mosaic and *Phytophthora* blight.

During the 1979 kharif (rainy) season, 116 progenies giving higher yields than the nearest check were selected. Each of these progenies involve at least one sterility-mosaic resistant parent. They were screened during the 1980 kharif for resistance in the sterility-mosaic nursery at the ICRISAT Center, Patancheru using the spreader-row technique developed at ICRISAT (see Annual Report 1976-77, p.82). At the same time each of these progenies were retested for yield at Hissar. As a result 15 sterility-mosaic resistant early-maturing lines with promising yield were identified (Table 3).

Line 73047-14-1-B-1-B-B-B&-3-B is resistant to *Phytophthora* blight as well as tolerant to wilt and may therefore be useful in the crossing program. Lines 75080-3-B-3-B&-1-4 and ICPL-184 are also tolerant to wilt. Seed of all the above-mentioned lines are available to interested individuals.

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