DRY PEA PRODUCTION AND RESEARCH IN BRAZIL

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Brazil has been a traditional dry pea importer, expending nearly US $ 6,000,000 annually with the importation of 13,000 tons of dry pea for its rehydrated and split pea industries.

Since 1976 a research project on dry peas has been carried out by EMBRAPA with the objective of introducing the dry pea crop in the Central Areas of Brazil. In most of these areas, the period with low temperatures (April-July; day = 27°C/night = 14°C) coincides with low rainfall (46 mm/month).

By 1981, the Centro Nacional de Pesquisa de Hortalicas - CNPH (National Research Center for Vegetable Crops)/EMBRAPA had signed contracts with some of the pea canning industries to develop a research project with dry peas. The project included the following objectives:

- Introduction and development of new pea cultivars
- Identification of disease and insect problems
- Studies with Rhizobium leguminosarum for nitrogen fixation
- Studies on planting date
- Studies on plant population and spacing
- Weed control

Dry pea cultivars for use in the rehydrating industry must have green seeds, 100-seed weight ranging between 14-16 grams, resistance to powdery mildew (Erysiphe pisi D.C.), good standing ability for mechanical harvesting and low levels of seed bleaching.

Powdery mildew and Rhizoctonia solani are the most important pea diseases in the Central Areas of Brazil. Ascochyta spp. become an important disease only in areas, or periods, with high air humidity. Powdery mildew resistance was found in cv. Triofin and has been introduced in our breeding material. Some lines with af and low parchment genes have been developed in an attempt to reduce harvesting losses. Through seed treatment with iprodione, good results in controlling R. solani have been achieved. Rhizobium strains with good nitrogen fixation capabilities were identified and presently most of the farmers do not utilize nitrogen as a fertilizer in the pea crop.

As a result of such efforts, the Brazilian dry pea cultivated area has increased markedly in recent years. In 1988, about 20,000 hectares were devoted to dry production in comparison with 15 hectares in 1980.

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