

DISEASES OF SUNFLOWER IN BRAZIL. José T. Yorinori; Ademir A. Henning; Léo P. Ferreira, and Martin Homechin. Centro Nacional de Pesquisa de Soja/EMBRAPA, Caixa Postal 1061, 86.100 Londrina, Paraná, Brasil.

The development of sunflower (*Helianthus annuus* L.) diseases in Brazil in the past four years has been accompanied by annual surveys. To this date 16 diseases have been recorded but only a few have shown to be important. Diseases caused by fungi: Sclerotinia wilt and head rot (*S. sclerotiorum*), rust (*Puccinia helianthi*), Sclerotium wilt and damping off (*S. rolfsii*), Rhizoctonia root rot (*R. solani*), charcoal rot (*Macrophomina phaseolina*), Rosellinia root rot (*Rosellinia* sp.), Phoma black stem (*P. oleracea* var. *helianthituberosi*), downy mildew (*Plasmopara halstedii*), Botrytis head rot or gray mold (*B. cinerea*), Alternaria leaf and stem spots (*A. helianthi* and *A. zinniae*), powdery mildew (*Erysiphe cichoracearum*); and Phomopsis stem blight (*Phomopsis* sp.). Disease caused by virus: sunflower mosaic virus. Diseases caused by bacteria: stinky stem rot (*Erwinia* sp.) and stem, petiole and leaf spots caused by a fluorescent *Pseudomonas* sp. These diseases may cause severe damage on developing sunflower plants under continued rainfall. Disease caused by nematodes: root knot nematode (*Meloidogyne incognita* and *M. javanica*). The most important diseases have been Sclerotinia wilt and head rot and Alternaria stem and leaf spots (*A. helianthi*). These two diseases have been mostly responsible for the decline of sunflower production in the state of Paraná, the major producing state. From an area of approximately 80,000 ha in 1981 it was reduced to nearly 5,000 ha in 1984. Yield losses have ranged from negligible to 100%, depending on weather condition.