

RUST DISEASE ON BLACK GRAM

It has been observed by the Research Officers of the Division of Plant Pathology A.R.S. Maha Illuppallama that the rust disease on pulses namely black gram and green gram caused by Uromyces phaseoli (Uromyces appendiculatus) takes its peak during certain periods of the year depending upon the weather conditions especially humidity and temperature.

High atmospheric humidity coupled with high temperatures are favourable in producing rust disease. Also profuse vegetative growth and dense planting which prevent air circulation produce local conditions ideal for rust development. Field trials and observations at M.I. reveal that rust disease takes its peak during late Maha season, i.e. January and February. In 1981, it was observed that severe incidence of rust occurred also during late Yala i.e. August and September. This was probably due to the development of temporary local conditions of weather ideal for this disease. This disease when it develops up to epiphytotic proportions could cause severe necrosis and defoliation and thereby serious crop losses.

The results of the observations on the incidence of this disease on black grams during 1977, 1978 and 1979 are presented in figure I (a), (b), and (c) and may be taken as a basic guide to adjust the time of planting of these pulses to escape losses due to rust, or take precautionary measures to arrest the development of this disease to epiphytotic levels.

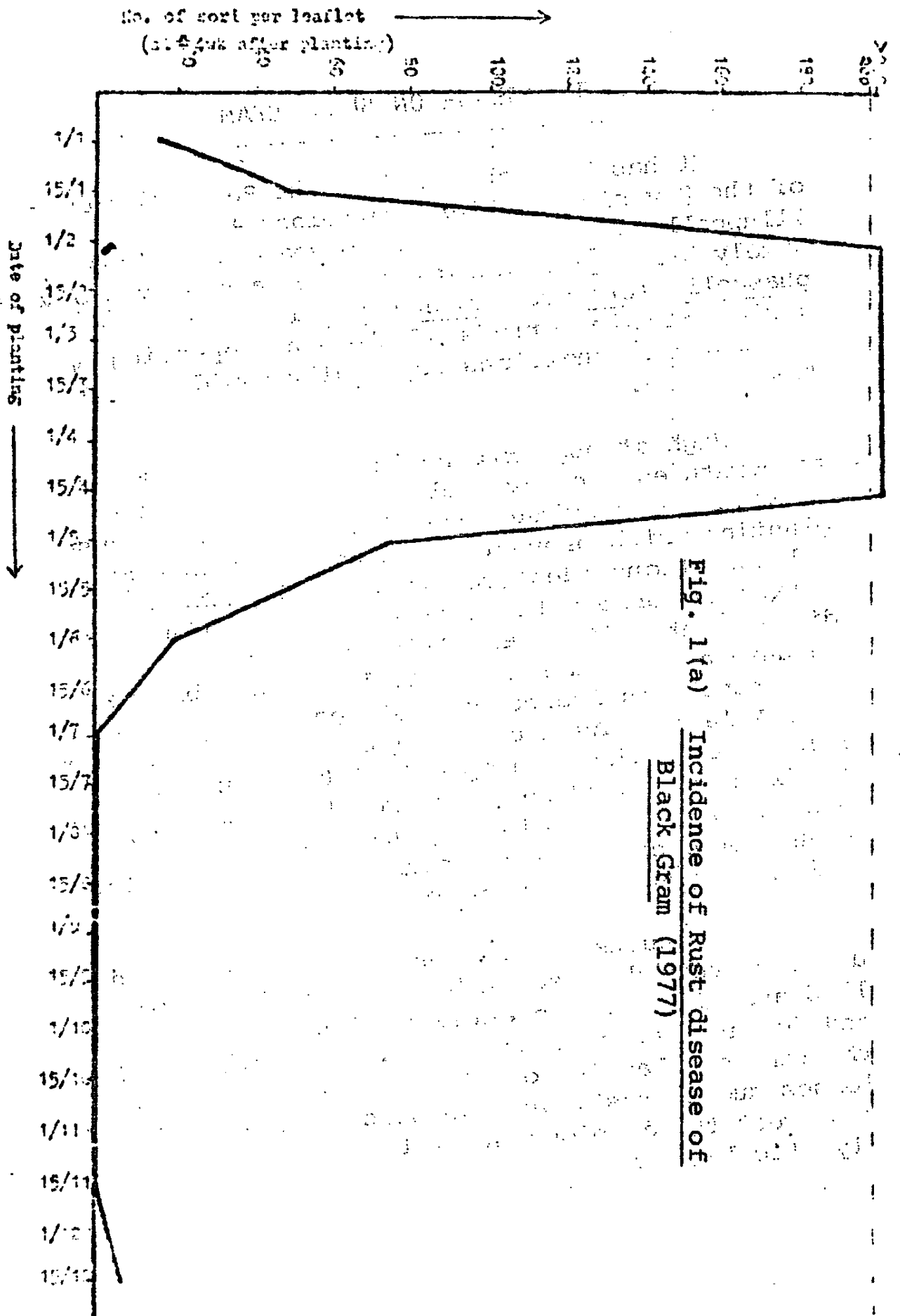
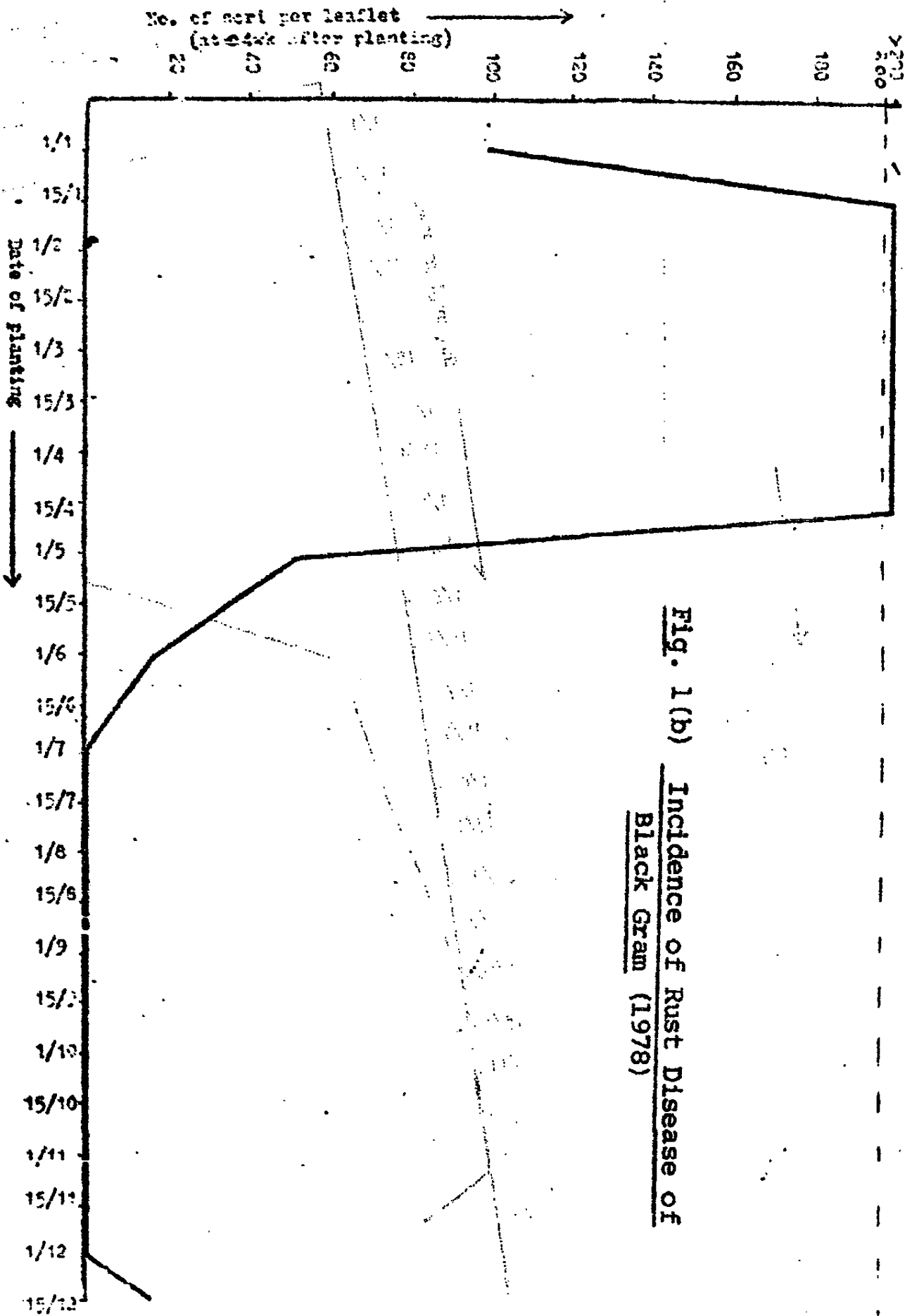


Fig. 1(a) Incidence of Rust disease of Black Gram (1977)



**Fig. 1(b) Incidence of Rust Disease of
Black Gram (1978)**

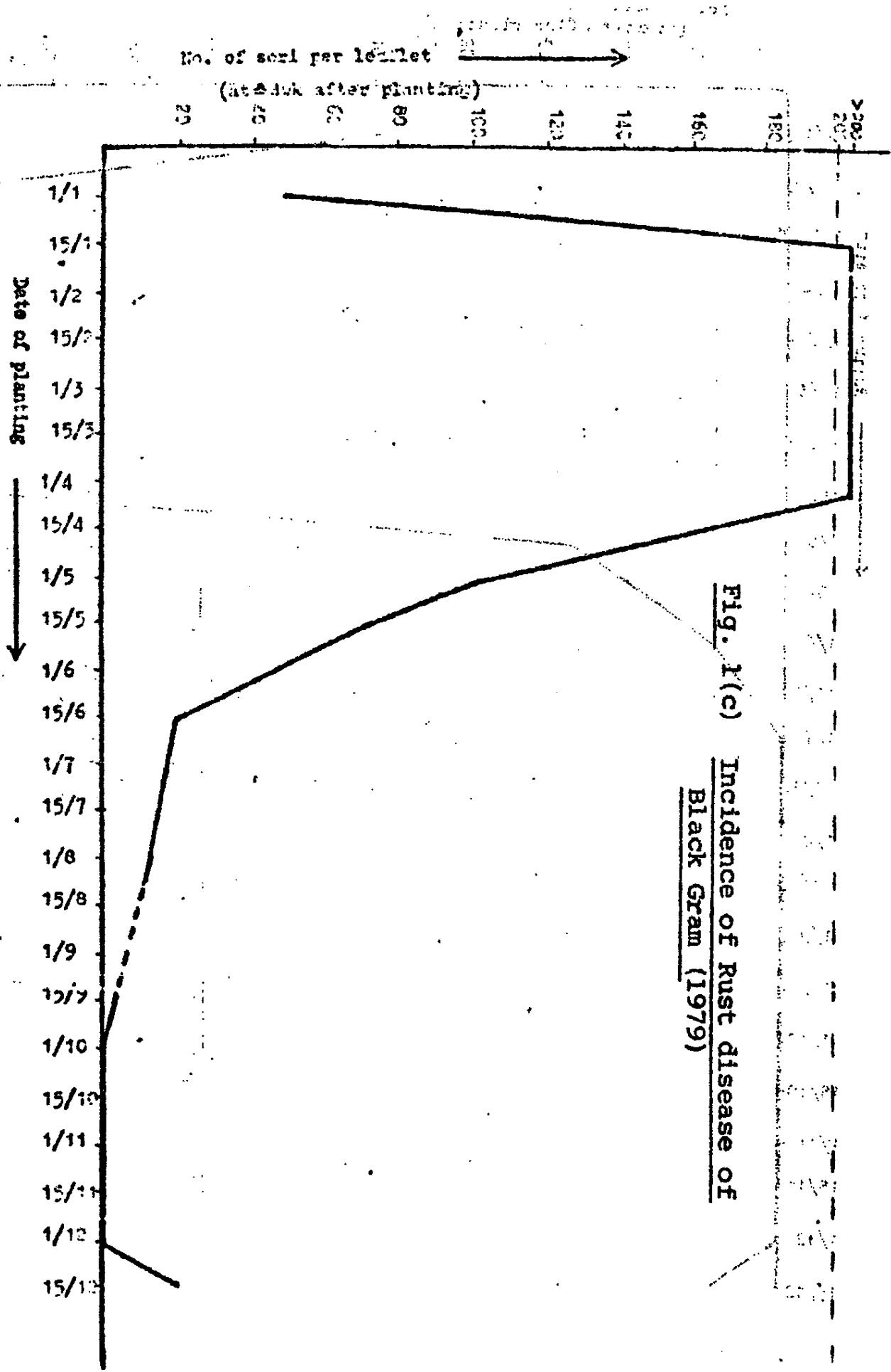


Fig. 1(c) Incidence of Rust disease of Black Gram (1979)