

EFFECTS OF BORON FERTILIZER ON SEED YIELD AND OTHER CHARACTERISTICS OF SIX SUNFLOWER CULTIVARS. E. Paludyszyn Filho and M.V.F. Andersen. EMBRAPA-Centro Nacional de Pesquisa de Soja, Caixa Postal 1061, 86.100 - Londrina, PR. Brasil.

Sunflower is a relatively new crop in Brazil and very little is known about the effect of micronutrient fertilizers on the crop. In order to study the effect of boron on seed yield and other characteristics of sunflower plants a field experiment was carried out during summer and fall season 1984 at Londrina, Brazil. The soil type was "Latossolo roxo eutrofico" (Eutruxox). Four hybrids (Conti 233, Conti 422, Cargill 33 and Indusem 380-A) and two open varieties (Issanka and IAC-Anhandy) were used. A basic fertilizer containing 50, 80 and 60 kg/ha of N, P₂O₅ and K, respectively and two levels of boron (0 and 2 kg/ha) were applied. Boron fertilizer promoted highest seed yield of hybrid Conti 422 (2242 kg/ha) and of open variety IAC-Anhandy (2042 kg/ha) while the plots without boron yielded 1799 kg/ha and 1622 kg/ha, respectively. Boron was also responsible for early flowering, shorter planting to harvest period, reduced height and greater head diameter. There was no apparent difference in stem thickness.

