

STUDY ON THE GROWTH, DEVELOPMENT AND THE EFFECTS OF NITROGEN FERTILIZER LEVELS TO THE YIELD OF PROMISING MAIZE VARIETIES ON GRAY SOIL IN BINH PHUOC PROVINCE

Ngo Phuoc Khanh, Le Quy Tuong, Nguyen Van Vuong

Summary

Studies on the growth and development of 6 new hybrid maize varieties and assessment of the appropriate nitrogen fertilizer rates for promising hybrid maize varieties were carried out in the summer-autumn of 2019 and winter-spring of 2019-2020 crops in Binh Phuoc province. The results have identified 03 new good and high yield ring hybrids such as CP501, NK7328, CP333. CP501 growing 99 days, average yield 90.70 quintal/ha, less infected with pests, diseases, good shedding, drought tolerant; NK7328 growing time, average yield of 90.42 quintals/ha, less infection with pests, diseases, good shedding, drought tolerance; CP333 variety has 101 days of growing time, average yield 81.40 quintals/ha, less infested with pests, diseases, good drains, fairly drought resistant. Concerning efficiency of nitrogen fertilizer application, the results show that: For the CP333, applied 180 kg N (on base of 10 tons manure + 80 kg P₂O₅ + 90 kg K₂O/ha), can get 95.39 quintals/ha, net profit of VND 40.22 million/ha exceeding the control of VND 2.77 million/ha. In case of NK7328, applied 210 kg N/ha reaching 101.39 quintals/ha net profit of VND 43.92 million VND / ha, exceeding the control of 6.57 million VND / ha .

Keywords: *Hybrid maize varieties NK7328, CP501, CP333, nitrogen fertilizing, high yield, gray soil, Binh Phuoc province.*