

EVALUATING THE OF FLOOD TOLERANCE IN NET HOUSE AND FIELD CONDITIONS OF SOME WINTER SOYBEAN VARIETIES FOR LOWLAND IN THANH HOA PROVINCE

Doan Van Luu, Vu Dinh Chinh, Vu Quang Sang

Summary

The experiment was carried out in winter under shade net and in the field at Thanh Hoa College of Agriculture and Forestry to evaluate the effect of waterlogging on some agronomic and physiological indicators on the ability Anti-fallow of 20 soybean varieties. Each seed was sown in a 25 cm diameter pot, 30 cm in height, 6 kg of land. Experimental soils are alluvial soil that is not accreted annually, cleaned and dried. After planting at the seedling stage (5 plants /pot), waterlogging was maintained at level 5 cm with 7 days to determine the viability of soybean cultivars. The results of the pot experiment showed that: waterlogging significantly reduced the number and weight nodules, leaf area, dry matter accumulation and individual productivity. The tolerance and recovery of the three varieties D912, D140 and ĐVN5 are best, giving higher individual yield (5.38 g/plant, 5.16 g/plant and 5.09 g/plant). AK03 was most affected, For low productivity (3.95 g/plant). Field experiments on 10 soybean varieties identified three well-developed, lowland soybean varieties with low pest and disease incidence, good spill resistance and highest productivity. The varieties are ĐVN5, D140 and D912 and their yields are 21.74 quintals/ha, 21.69 quintals/ha and 21.65 quintals/ha, respectively. The DT2000 variety in field trials yielded low yields (15.33 quintals per hectare).

Keywords: *Soybean, waterlogged, growth, physiology, yield.*