

ABSTRACT

Tomatoes are one of the horticultural crops that are very important for humans. One effort to increase tomato plant production is by improving the availability of calcium nutrients in the soil using dolomite lime and providing the right volume of water. The aim of the research was to examine the effect of using dolomite lime and the volume of water applied and their interaction on the growth and yield of tomato plants. The research used a two-factor Randomized Block Design (RBD) with three replications. The first factor is dolomite lime (0, 100, 150 g/polybag). The second factor is water volume (250, 1000, 1500 ml/polybag). The results of the research showed that giving dolomite lime had a significant effect on plant height, stem diameter, flowering age, fruiting age, number of fruit per plant, fruit weight per plant, fruit diameter, fruit length, and production with the best dose being 150 g/polybag. The volume of water has a significant effect on the weight of the fruit planted, production, and the fresh weight of the roots with the best water volume being 1000 ml/polybag

Key word: fruit weight, calcium, drought, Soil pH, flowering age