PRODUKTIVITAS BAHAN SEGAR DAN KADAR MINYAK ATSIRI TANAMAN NILAM (Pogostemon cablin Benth) PADA BERBAGAI DOSIS PUPUK NITROGEN DAN UMUR PANGKAS

Productivity of Fresh Ingredients and Levels of Plant Essential Oil Patchouli (Pogostemon Cablin Benth) at Different Doses of Nitrogen Fertilizer and The Age of Prune

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Abstract

This research goes to study the influence of various dosages nitrogen fertilizer and the days of prune against the production of fresh and patchouli essential oils. These experiment used Randomized Complete Block Design, two factors and three replications. The first factor is the dose of nitrogen derived from Urea fertilizer consisting of 0, 45, 90 and 135 kg N/ha. The second factor is the age pruning consisting of 60, 75 and 90 days after planting (DAP). The objective of experiment was conducted in IPB Experimental Station, Leuwikopo, Dramaga, Bogor in February to July 2011. Planting material used is 2 months old. The seedling of patchouli varieties derived from breeding Sidikalang Balittro Research, Cimanggu. The seedling were planted in the field with a spacing of 50 cm x 50 cm. Trials nitrogen fertilization is carried out twice, i.e. half dose of treatment in the planting and the rest is given 60 days after planting.

The results showed that the height of the plant, the number of branches, the number of leaves, weights wet and dry weight highest harvest produced by the plant, which fostered 90 kg N/ha. The nitrogen fertilizer not affect leaf area index, while the highest levels of the oil produced by the plant without fertilizer nitrogen. The age of the real impact of the trim height, number of branches and leaves of patchouli plants. But the age of prune not affect the leaf area index, weights wet and dry weight of the harvest. The age of prune 90 HST producing plants with tall 62.2 cm or an average 7.9 % higher than the age of prune other, the number of branches 50.4 or an average 7.7 % higher than the age of prune other, and the number of strands of 170.2 leaves or average 7.8 % more than the age prune other. Highest patchouli oil content is at the age of prune 75 HST without a nitrogen fertilizer that is 2.19 %.