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PEST MONITORING ON PLANTS LONG BEANS (VIGNA UNGUICULATA L)

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Abstract
Long bean has Mark commercial tall and have a very big role in fulfilling need food nutrition society, especially to vegetable protein requirements. Plant this could grow and produce with good want characteristic physical loose soil, depth soil enough in To increase productivity farmer vegetable long bean do control pest with depending on spraying insecticide synthetic because considered more effective and efficient in its use. The aim of this research is for knowing type pests found in gardens long beans in the area Plantation Village of the District of Young Development North Batu Labuan. Result observation could be used as a base in taking control action pests by farmers. The observation was done on tana man peanut in the village of plantations in the district of Membang Muda Labuhan Batu Utara from April until June 2021. Map observed sample of 1x1 m. Observation conducted with use monitoring method. Observation data is noted every week. The result from this observation obtained that pests on plants long beans observed in the Plantation Village of Membang Muda District Labuhan Batu Utara is an aphid Aphids croccivora, and caterpillars borer Maruca testicular. Average attack both 0.83 and 5. Population pest most in the area there is caterpillar borer Maruca testicular. Pest Control Measures could be conducted with spraying chemicals or technical culture. Pest monitoring urgent conducted as base taking decision technical control.

Keywords: Pets; Monitoring; Plant; Long Beans; Vigna Unguiculata L

Introduction

Long bean (*Vigna unguiculata* L.) is one of the types of vegetable nut. Long bean has Mark commercial tall and have a very big role in fulfilling need food nutrition society, especially to vegetable protein requirements. Plant this could grow and produce with good want characteristic physical loose soil, depth soil enough in (Hermawan et al., 2017) . There are two pest main attack plant long bean namely *Aphids croccivora* lice, and caterpillars borer *Maruca testicular* (Apriliyanto & Setiawan, 2014) . To increase productivity farmer vegetable long bean do control pest with depending on spraying insecticide synthetic because considered more effective and efficient in its use.

Monitoring pests and diseases is a method for collecting data and information about state Organism bully Plants (OPT), attacks and enemies naturally in the field. Monitoring as well as handling farmers in managing land farming and taking decision control. In more coverage areas, pest monitoring is required to collect data that will be utilized as ingredient reporting, evaluation, and planning. Besides that, pest monitoring generates useful data in implementation forecasting and improvement (Sharief, 2016) . Monitoring of pest status is aimed at knowing, behavior pests, dynamics development population, level damage caused by OPT. The aim of this research is knowing type pests found in gardens long beans in the area Plantation Village of the District of Young Development North Batu Labuan. Result observation could be used as a base in taking control action pests by farmers.

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Research Method

The observation was done on tana man peanut in the village of plantations in the district of Membang Muda Labuhan Batu Utara from April until June 2021. Map observed sample of 1x1 m. Observation conducted with use monitoring method. Observation data is noted every week.

Results and Discussion

Table 1. Observation of Pests on Plants Long Beans (*Vigna unguiculata* L.)

Pest	Observation						Results	Average
	1	2	3	4	5	6		
aphids _	0	0	1	2	2	0	5	0.83
Caterpillar borer	2	5	3	6	7	7	30	5

Table 1 shows that type pests on plants long beans are aphids, caterpillar's borers and beetles koksi. Attack aphids hama with average 0.8 and pests caterpillar borer with average 5. Aphids include insect that is cosmopolitan and polyphagous that have many plant host like the family Leguminosae, Malvaceae, Caricaceae, Solanaceae, Amaranthaceae. This pest also acts as a vector (insect infectious) various legume virus disease. This pest attacks plant nuts young until old. Increase in CO2 and temperature impact on interactions long bean, aphids, and predators (Rao et al., 2018) . Warming up climate could increase the possibility of the fall of aphids and their consequences influence the development of individual and growth aphid population (Ma & Ma, 2012) . Subtraction amount of water available for plant long bean (stress deficit humidity soil) in plants host influence trend aphid populations in various step growth long beans (Agele et al., 2006) .

The result of this observation found that level attack pest occurs moment plant currently is at in phase generative growth. During growth, plant long bean experience several phases influencing growth reaction plant long bean to attack pests and diseases (Octaviani et al., 2017) In general plant becomes prone to attack pests and diseases moment is in phase generative . Phase this known as phase or period critical plant to infection various type attack from pests and diseases that cause drop results production. A study previously also stated that caterpillar larvae attack borer on flowers and pods long bean varied from time to time in season plant with peak infestation detected at 6 weeks after the plant (Jayasinghe et al., 2015)

Besides that factor environment like population plant or distance can plant to influence attack pests (Asmaliyah & Rostiwati, 2015) . Set spacing like that appearance Besides could lower attack pest (Oka, 2005; Sumardi & Widyastuti, 2007; Supriati et al., 2011) , and effort management good plantation _ (Noviana & Ardiani, 2020) .

Conclusion

The result from this observation obtained that pests on plants long beans observed in the Plantation Village of Membang Muda District Labuhan Batu Utara is an aphid Aphids croccivora, and caterpillars borer Maruca testicular. Average attack both 0.83 and 5. Population pest most in the area there is caterpillar borer Maruca testicular. Pest Control Measures could be conducted with spraying chemicals or technical culture. Pest monitoring urgent conducted as base taking decision technical control.

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