EFFECT OF PYRAKLOSTROBIN FUNGICIDE APLICATION TO SUGARCANE (Saccharum officinarum [L.]) AND SUGAR PRODUCTION

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ABSTRACT

Sugarcane (Saccharum officinarum [L.]) is the main ingredient used in the manufacture of sugar. Sugarcane is still the most important commodity in the plantation area and to generate foreign exchange. National sugar industry declined dramatically in the last ten years (1994-2004). Sugar production in 1994 reached 2,453,885 tons of the total area of 424,700 ha. Furthermore in 1998, the total area of 370,260 ha could be achieved only 1,488,268 tons of sugar and in 1999 with a total area of 340,802 ha of production gained only 1,466,620 tons. The low production was caused by the low yield of sugarcane. In 2004 with the increase in yield, sugar production reached 2.051 million tons of sugar even though the area decreased. From this data it appears that the role of sugarcane quality are very big to the production of sugar is obtained, so that one of the factors that must be corrected to increased sugar production is by improved the sugarcane quality, include increased in yield. In this respect a good cultivation of sugarcane is an effort to improve and enhance the sugarcane productivity and sugarcane quality. One of the techniques in cultivation is maintenance. Maintenance includes watering, fertilizing, stitching, and controlling pests and diseases. Pyraclostrobin is an active ingredient from strobilurin group, which are reported capable to controlling the disease and as a plant growth regulator. This research was conducted to determine: (1) determine the effect of application of fungicide containing pyraclostrobin on sugarcane diseases caused by fungi, (2) know when and how the proper application to produce the best production of sugarcane and sugar, (3) know the effect of application of fungicide containing pyraclostrobin against sugarcane and sugar production.

This research was conducted at PT. Perkebunan Nusantara VII (Persero) Bunga Mayang Unit North Lampung. This research was conducted in November 2009 to December 2010. The treatments were applied to experimental plots in randomize completely block design with 8 treatment and 4 replications. Uniformity mean

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value among the treatments was tested using Bartlett test and the aditivity data were tested with Tukey test. Data were analyzed with ANOVA and separation of mean value is being conducted with Honestly Significant Difference Test (BNJ) at 5% significance level.

The results showed that application of fungicides contain pyraclostrobin on sugarcane are not able to control pokahbung and red stains disease. Fungicide applications contain pyraclostrobin not give effect to the production of sugarcane and sugar.

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