A study using liquid organic fertilizers super LDD.2 and high quality organic fertilizers for tapping panel dryness and increasing para rubber yields.

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Abstract

This study aimed to a study using liquid organic fertilizers super LDD.2 and high quality organic fertilizers for tapping panel dryness and increasing para rubber yields. This research was conducted from October 2008 until September 2010 at Moo 3 Banmuang district, Amphoe Sri Banphot, Phatthalung. The main objective of this study was to investigate the changes of the soil chemical properties after applying liquid organic fertilizers super LDD.2 and high quality organic fertilizers for The investigated parameters included 1) numbers of the tapping panel dryness rubber tree 2) the quantity of the latex. The research was designed for 5 treatments with 3 replications and RCBD was the statistical analysis method used in this study. Treatments 1 was on the farmer regular simple method (the application of the chemical fertilizer formula 15-15-15, 1 kg/rubber tree .Treatments 2 was on was the use of chemical fertilizer at the rates recommended by the Department of Agriculture. (the application of the chemical fertilizer formula 30-5-18, 1 kg/rubber tree. Treatments 3 was on 2/3 of fertilizer in treatment 2 and liquid organic fertilizers super LDD.2 (the application of the chemical fertilizer formula 30-5-18, 0.66 kg/rubber tree and 1:500 liquid organic fertilizers super LDD.2). Treatments 4 1/3 of fertilizer in treatment 2 and using liquid organic fertilizers super LDD.2 and high quality organic fertilizers (the application of the chemical fertilizer formula 30-5-18, 0.33 kg/rubber tree and 1:500 liquid organic fertilizers super LDD.2, and 5 kg/rubber tree of and high quality organic fertilizers) and Treatments 5 was on using liquid organic fertilizers super LDD.2 and high quality organic fertilizers (1:500 liquid organic fertilizers super LDD.2 and 5 kg/rubber tree of high quality organic fertilizers) After 2 year of investigation and observation, the results showed insignificant changed of pH between treatments with the decreasing of acidity as shown in treatment 3, 4 and 5. The amount of organic matter content shown highly significant, the highest amount of organic matter was found in treatment 5 (2.26%). The available phosphorus was also different between treatments, the highest available phosphorus was found in treatment 4, whereas the highest available potassium was found in treatment 5 but it was insignificant different between treatment and the amount of available potassium was unchanged as it was before start this research. The number of tapping panel dryness trees were investigated, it was found totally 3 dryness panel tree in treatment 1 (1 tree in year 1 and 2 trees in year 2) whereas 1 dryness panel was found in treatment 5, however it did not differ from it usually happens in the regular plantation. The latex production was remain unchanged until the sixth of tapping season, the latex produced from the 6th and 7th of the tapping season were found highly significant as the highest production of the latest was in treatment 3 (81.50 g/tree/1tapping).

On the other hand, the dry rubber content was found indifferent in every treatment. This research was on 2/3 of fertilizer in treatment 2 and liquid organic fertilizers super LDD.2 it have a most of the quantity of the latex. The diameter of rubber tree was also measured and it was increasing in every treatment, the highest increasing rate was found in treatment 3 (2.39 cm/year).

Keywords: liquid organic fertilizers, para rubber, tapping panel dryness