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KEY WORDS :NEEM AND GINGER SOLUTION/ CONTROL / LEAF EATING
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SURUT SRJAINOI: USE OF MIXED SOLUTION OF NEEM (*Azadirachta indica*
VAR. SIAMENSIS VALETON) AND THAI GINGER (*Alpinia siamensis*) FOR
CONTROLLING LEAF EATING BEETLES (*Adoretus compressus* WED.) ON
SWARTMORE ROSE. THESIS ADVISORS: PRAPEUT KERDSUEB, M.Sc. CHUMLONG
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The objective of this study is to compare the effectiveness of solutions from natural plants and from synthetic chemicals in controlling leaf eating beetles on swartmore rose. Different concentrations of solutions, spraying intervals and the costs of various solutions were compared. The treatments were assigned into 5x4 factorial in RCB experimental design. The first factor was the concentration of solution : 1 kg. neem / 1 litre water with 1 kg. ginger / 10 litres water, 1 kg. neem / 2 litres water with 1 kg ginger / 20 litres water and 1 kg. neem / 4 litres water with 1 kg. ginger / 40 litres water. Four spraying intervals (3 ,5, 7 and 9 days) were used as the second factor. Four replications were done over the 29 day study.

The result indicated that there were no significant statistical differences ($P>0.05$) among the 3 concentrations of neem and ginger. These solutions were significantly more effective in controlling the beetles than no spray, but less effective than spray with azodrin ($P<0.01$). Spraying interval made no significant statistical difference in effectiveness ($P>0.05$). The concentration of solution had no interaction with spraying interval. The cost of azodrin solution was lowest , at 120.98 baht /rai while the costs of the neem and ginger solutions were 256.67, 512.31 and 1,023 baht /rai in order of increasing concentration of mixed solution. Therefore, this study showed that the solution of neem and ginger can reduce the number of the leaf eating beetles when compared to no spray, but is has higher cost and less effectiveness than azodrin solution.