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EFFECT OF SPRAYING TURMERIC AND ROSELLE EXTRACTS ON YIELD AND QUALITY OF SUPERIOR GRAPEVINES

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ABSTRACT

This study was carried out during 2014 and 2015 seasons to examine the effect of spraying turmeric and/ or roselle extracts each at 0.5 to 2 % on growth, yield and quality of superior grapes.

Single and combined applications of turmeric and roselle extracts each at 0.5 to 2 % resulted in considerable stimulation of main shoot length, leaf area, pruning wood weight, cane thickness, chlorophylls a & b, total chlorophylls, total carotenoides and N, P, K, Mg in the leaves comparing with that in the control.

There was a remarkable and gradual promotion on percentage of berry setting, yield expressed in weight and number of clusters per vine as well as weight, length and width of cluster due to increasing concentrations of each material. Percentage of shot berries was greatly declined with using both extracts either alone or in combination rather than untreated vines

Subjecting the vines to turmeric and/or roselle extracts had beneficial effect on improving quality of the berries in terms of increasing berry weight and dimensions, percentage of T.S.S, reducing sugars and reducing percentage of titratable acidity over the check treatment. The promotion was related to the increase in the concentrations.

It is necessary to use a mixture of turmeric and roselle extracts each at 1% three times (growth start, just after berry setting, and 21 days after berry setting) for improving yield quantitatively and qualitatively of Superior grapevines grown under Minia conditions.

Key words: growth, quality, Superior cv. Grapevines, turmeric and roselle extracts, yield.