

**EFFECTS OF ACARID MITE *CALOGLYPHUS REDIKORZEVI*
ZACH. (ACARI:ACARIDAE) ON PEAT MOSS COMPOSITION
AND ITS VALUE AS SOIL FERTILIZER FOR PLANT
GROWTH**

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Abstract

The purpose of this study was to understand the role of acarid mite *Caloglyphus redickosevi* Zach as alternative fertilizer by determining what effect it had do on the peat moss N.P.K. ratio. Also N., P. and K. elements in control were significantly less than that of different treatments. They were also significantly differences between treatments. There was increased of the N., P. or K. on peat moss composition samples with increase adding amount of acarid mites. Appling linear regression for obtained data indicated significant increase in decomposited peat moss N. content. No significant increase was obtained for P and K content.

Some measurements of spinach growth as leaves number, plant height, and fresh weight were influenced by amount of different mites which added to plants. These measurements were recorded after 15, 30, 45 and 60 days of sowing. Appling multiple linear regression for obtained data indicated significant increase in leaves number in relation to used decomposited peat moss added to planting soil as well as time progressed. Appling multiple linear regression for obtained data indicated highly significant increase in plant height in relation to used decomposited peat moth added to planting soil as well as time progressed. Appling multiple linear regressions for obtained data indicated significant increase in leaf

fresh weight in relation to used decomposed peat moss added to planting soil, while progressed time indicated highly significant increase

Also chlorophyll A, B, carotenoids and leaf area which determined after 60 days of sowing were influenced. Applying linear regression for obtained data indicated significant increase in ChA content and leaf area in relation to used decomposed peat moss added to planting soil. No significant increase was obtained for leaf ChB and Carotenoids content.