

Investigation of the resistances of some varieties of rose flower to *Tetranychus urticae* Koch and *Tetranychus cinnabarinus* mites under different fertilizers

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ABSTRACT:

It is well known that fertilizers increase density of mites and on the other hand farmers use fertilizers for increase in quality and quantity of products. The use of some varieties may be suitable choice for resistance to mites in plants reared with fertilizers. This study was conducted to investigate the resistance of some rose cultivar to mites such as *Tetranychus urticae* Koch and *Tetranychus cinnabarinus* at different fertilizer levels under greenhouse condition. The commercial rose cultivars viz., Dolce Vita (DV), Polar Star (PS) and Magic Red (MR), were investigated. These cultivars were fertilized with iron and nitrogenous fertilizers. We have checked the resistance with a number of mature mites, immature mites and eggs. Also antibiosis, antixenosis, life and productivity parameters were examined for these cultivars. Our findings showed that fertilizers increase density of mites, especially on MR cultivar. On the other hand, life and productivity parameters of mites were higher for MR cultivar and were lower for DV cultivar. The DV cultivar had the highest antibiosis and antixenosis resistances. Thus mites prefer MR cultivar and it can be stated that DV cultivar is a suitable cultivar for integrated pest management program.

Keywords:

Antixenosis, life table, Nitrogenous fertilizer, Rose cultivars, *Tetranychus urticae*.