



PHYSIOLOGICAL STUDIES ON "LE-CONTE" PEAR TREES

By

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ABSTRACT

This study was carried out during 2018 and 2019 seasons on 15-year-old Le Conte pear trees (*Pyrus communis* L.X *Pyrus pyrifolia* N.) budded on *Pyrus betulaefolia* rootstock, planted at 5 × 5 meters apart (168 trees / feddan) in sandy soil under drip irrigation system and grown at El-Kassasien Horticultural Research Station, Ismailia Governorate. This investigation was carried out to evaluate the response of vegetative growth, nutritional status, flowering, fruiting and fruit quality attributes of fifteen-year-old Le-Conte pear trees to manipulation with NPK chemical and organic fertilizers with Mo spray. The results indicate that, vegetative growth measurements, nutritional status, blooming spurs percentage and fruit quality were highly improved with (NPK) fertilizer at 100 percentage + Mo at 3percentage. This done aimed to benefit from Mo and Fe roles in improving le-conte pear trees productivity and fruit quality all rebuts. The results indicate that, the combinations between the two investigated elements reflected appositve effect on yield and fruit quality than spraying with each component individually. The best result was achived with Mo at 3percentage combined with Fe at 1000 mg/l as such treatment improved all studied parameters.

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