soil properties and nutritional statute in Tunisian olive tree orchards

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In Tunisia, olive tree is the principal fruit culture. This patrimony is dominated by the Chemlali oil variety. Several factors (drought and nutritive stress) affect the olive production. The present study rests on a tentative survey done on eight parcels of olive tree, in Tunisian semi arid, in order to evaluate the nutritional status of trees during physiological stages (flowering, fruit hardering and early maturity) and also to determine the physical and chemical properties of soil for the different olive tree orchards. The results of analyses showed firstly, a very low level in organic matter in order to 1%, and 0.06% (in average) in total nitrogen. For leaves analysis results showed a deficiency in phosphorus and nitrogen nutrition below the admitted average. Secondly, a relation between climatologically parameters and some physical proprieties of soil (useful reserve) and finally to determine the lower limits in nutritive elements of olive tree culture in Tunisian semi arid.

Key words: olive tree - nutritional status - soil proprieties- Tunisian semi arid.