

ABSTRACT**M. Sc. Thesis****THE SEASONAL CHANGES OF
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This study was conducted in Köşk district of Aydın province to determinate of plant nutrient status and the most suitable time to take leaf samples of chestnut (*Castanea sativa Mill.*) orchards. For this purpose, thirty orchards were chosen and three trees from each orchard were selected. The samples were taken from the twenty five years old Karaaşı chestnut local variety from the beginning of vegetation to the harvest. At the same time, soil samples were taken from 0-30 cm soil depth at the beginning of vegetation period.

According to the leaf analysis results, N, P, Mg, and B concentrations increased up to August, then they decreased. K, Cu and, Na contents gradually increased from the beginning of vegetation to the end of harvest. Ca and Mn contents continuously increased during the vegetation period while Fe content decreased up to August and it increased then decreased at the end of harvest. Zn content was stable until September. Then it rose to the harvest.

As a result, the most suitable time to take leaf samples of Karaaşı chestnut local variety was determined as 15 July – 15 August period.

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Key Words : Chestnut (*Castanea sativa Mill.*), Nutrients, Seasonal Changes