VARIATIONS IN CHLOROPHYLL, SPAD VALUES AND SOME NUTRIENT CONCENTRATIONS DEPENDING ON CHLOROSIS IN PEACH LEAVES

İbrahim ERDAL¹, Remziye TÜRKMEN¹, Ayten AKGÜN¹

e-mail: ibrahimerdal@sdu.edu.tr

Abstract

The objectives of this study was to measure greenness (SPAD), chlorophyll concentrations and Fe, Mn, Zn, Cu and Mg concentrations and examine the relations among them in the leaf having different chlorosis levels. The SPAD chlorophyll meter readings were used to measure the leaf greenness. Leaf chlorophyll contents were also determined using the acetone extraction method and other nutrients were measured with AAS. Leaf chlorophyll content, SPAD readings and Fe, Mg, and Mn concentrations increased with the leaf green colour increase. SPAD readings were significantly correlated with leaf chlorophyll content, Fe, Mn and Mg. Also, close correlation was seen between chlorophyll content and leaf Fe concentration.

Key words: Leaf greenness, SPAD, chlorophyll, nutrients