



Estimating of water use efficiency in soybean varieties by using of carbon isotopic discrimination

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The isotopic ratio of ^{13}C to ^{12}C in plant tissues is less than the isotopic ratio of ^{13}C to ^{12}C in the atmosphere, indicating that plants discriminate against ^{13}C during the photosynthesis. The values of CID in plants, after 24 days of water stress, have been ranged between 17.12-17.86, thus the lowest value belongs to Conquista cultivar, while the highest belongs to Aurora. Between WUE and CID there is a linear negative correlation with a high coefficient ($r^2 = 0.927$). variety.