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LEAF GAS EXCHANGE OF *Dicranopteris flexuosa* (Schrad.) Underw. (Gleicheniaceae) UNDER DIFFERENT LIGHT ENVIRONMENTS

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Dicranopteris flexuosa (Schrad.) Underw. (Gleicheniaceae) is a invasive fern species from Brazil which can be found at different environments showing different light conditions. The objective of the present study is to evaluate the leaf gas exchange of D. flexuosa growing under two natural environments with different light conditions. Populations of D. flexuosa growing at the Quedas do Rio Bonito Ecological Park, Minas Gerais, Brazil, were sampled from two different environments: the "Campo Rupestre" with open vegetation where plants grown exposed to full sun and the Atlantic Forest were plants grown under shading condition. The net photosynthesis (A), transpiration rate (E), water use efficiency (WUE) and stomatal conductance (g_s) were evaluated on 20 plants from each population. These evaluations were made at morning, between 8 and 10 a.m., on one leaf per plant. The measurements were conducted using an infrared gas analyzer (IRGA) model LI-6400XT a 6-cm² cuvette and a red/blue LED light with the photosynthetic photon flux density fixed to 1500 µmol·m⁻²·s⁻¹. The data were submitted to one-way ANOVA and Tukey test to p<0.05. Photosynthesis was 11,1% higher on plants from plants which grown at full sun as compared to shade environment. In addition, the gs was 22,2% and the transpiration rate 37,8% higher on the sun plants as compared to shade ones. However, the WUE was higher on plants from the shade environment. Thus, the leaf gas exchange of D. flexuosa shows higher potential for net photosynthesis on the sun leaves but the higher transpiration may limit the photosynthesis efficiency on this environment.