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Effects of shading on seedlings growth of two wild species of *Passiflora*L.

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Passiflora suberosa litoralis and *P. palmeri* var. *sublanceolata* are species with ornamental potential, which occur in Brazil. They were evaluated with the purpose of verifying the effects of shading on the seedlings growth. Artificial shading was obtained with black plastic screens which allowed the reduction of 25, 50 and 75% of global radiation, with a control treatment under full sun. The initial growth evaluations of the seedlings were performed 46, 60, 74 and 88 days after emergence (DAE), through measuring of height (HS) and diameter (SD) of the stem. At 94 DAE, were determined the leaf area (LA), ratio shoot/root (S/R), specific leaf area (SLA) and leaf area ratio (LAR). Root (RDW), stem (SDW), leaf (LDW) and total (TDW) dry weight were obtained after drying at 70°C. The experiment was conducted in a completely randomized design, using a 4 x 2 factorial arrangement, with ten repetitions for growth evaluations and five repetitions for analysis of dry weight increase and leaf area parameters. Results were submitted to ANOVA, followed by Tukey's test and regression analysis. It was verified an increment in HS with the increase of shading starting from 60 DAE at 50 and 75% of shading. Increases in SD were observed at full sun and at 25% of shading. Highest RDW, LDW and TDW means were observed at 50% of shading for *P. palmeri* var. *sublanceolata* and at full sun for *P. suberosa litoralis*. There wasn't observed a significant difference between shading levels for SDW. A significant effect on LA, SLA and LAR were observed for two species, whose highest means were under 50 and 75% of shading. Ratio S/R values didn't differ significantly. Observations related to the initial growth reflect the development and the adaptation of adult plants to heterogeneous environments. Therefore, *P. palmeri* var.

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sublanceolata seedlings adapted better to moderate shade conditions and *P. suberosa* *litoralis* seedlings should be cultivated at full sunlight.

Key-words: Passion flowers, irradiance, development, ornamental potential

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