

The Effects of Shading, Media and Concentration of Water-soluble Fertilizer on Potted of *Ptychoraphis Augusta*

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Abstract

Ptychoraphis augusta is a newly imported plants, has beautiful plant form and suitable growth habits for potted interior use. These separated experiments were proceeded to establish an optimum cultivating system for local farmers. Shading net (0, 40, 60, and 80%) and substrate(peat: tree fern, peat: loam, tree fern: loam =1:1 v/v; and loam) treatments were conducted on two-year old plants. Water-soluble fertilizers of four concentrations were applied on one-year old seedlings. Through these experiments, we hope to establish the production system of *Ptychoraphis augusta* and those will be recommended to local farmer.

Results showed *Ptychoraphis augusta* under 60% shading net can obtain taller plant, wider stem and leaf spreads. Plants under 60 and 80% shading had darker green leaves. Tree fern: loam and loam grown plants had better horticultural characteristics. Under shaded environments, fertilizing once a week with Peters(30-10-10), diluted 1000-2000x, produced plants of better quality and growing faster. In outdoors, concentrations of 1000 and 2000x treated plants grew better.

Key words: *Ptychoraphis augusta*, shading, media, concentration of water-soluble fertilizer

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