



## ***In vitro* multiplication of *Heliconia chartacea* “Sexy Pink”**

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**Keywords:** *Heliconia* micropropagation, *in vitro* multiplication protocols

Tropical flowers are taking up increasingly more space in the flower market and the demand for these products is growing, providing a viable alternative investment for agriculture in Brazil. *Heliconias* are ornamental plants of great interest for floriculture, with special emphasis on *Heliconia chartacea* (Lane ex Barreiros) var. “Sexy Pink”. This species stand out due to its exotic-looking inflorescences, high durability post-harvest and high acceptance in the domestic and international markets. However, the success of this investment is directly related to the quality of the material used by producers as stock plants. Considering that the propagation technique is performed using rhizomes and that the transmission of important diseases between successive plantings occurred by contaminated propagules, the production of plantlets through micropropagation has lately become a viable alternative on a commercial scale. In light of this issue, this research was carried out aiming to evaluate the effect of MS medium with different concentrations of BAP on *in vitro* multiplication of *H. chartacea* var. “Sexy Pink”. The experiment was conducted in the Plant Tissue Culture Laboratory belonging to Embrapa Western Amazon, (Manaus, Brazil). Stem apices of the Sexy Pink were inoculated on MS medium supplemented with IAA (0.6  $\mu\text{M}$ ), BAP (8.9; 13.3 or 17.8  $\mu\text{M}$ ), coconut water (0 or 100 mL L<sup>-1</sup>) and 30 g L<sup>-1</sup> sucrose, gelled with agar 6 g L<sup>-1</sup>, totaling six treatments. Subculturing of the shoots for multiplication on the same medium induced multiples shoots. Independently of the medium and subculture, the average multiplication rate was 1.6. After three subcultures, the explants cultured in MS with BAP 13.3  $\mu\text{M}$  showed highest shoot proliferation (6.5 shoots per explant) and the significantly lower rate was obtained with MS plus BAP 17.8  $\mu\text{M}$  (1.5 shoots per explant). For the other treatments, the multiplication rate ranged from 4.0 to 6.0 shoots per explant. There was influence of the subculture with an average rate decrease from 46.5 in the first subculture to 5.6 in the third. The MS with BAP 17.8  $\mu\text{M}$  showed different results for increasing shoot length which was significantly influenced by subculture. Thus, under the tested conditions, the result showed that the more efficient medium to shoot proliferation was the MS medium supplemented with 0.6  $\mu\text{M}$  IAA, 13.3  $\mu\text{M}$  BAP, 30 g L<sup>-1</sup> sucrose and 6 g L<sup>-1</sup> agar.