

***Nasturtium officinale* Microshoot Culture Multiplied in PlantForm Bioreactor—Phytochemical Profiling and Biological Activity**

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1. Microshoot Appearance and Biomass Growth

The appearance of the tested bioreactor cultures was dependent on the growth period's duration (Figure 1A,B). After 10 and 20 days, *N. officinale* microshoot cultures were characterized by a green color and a large number of shoots.

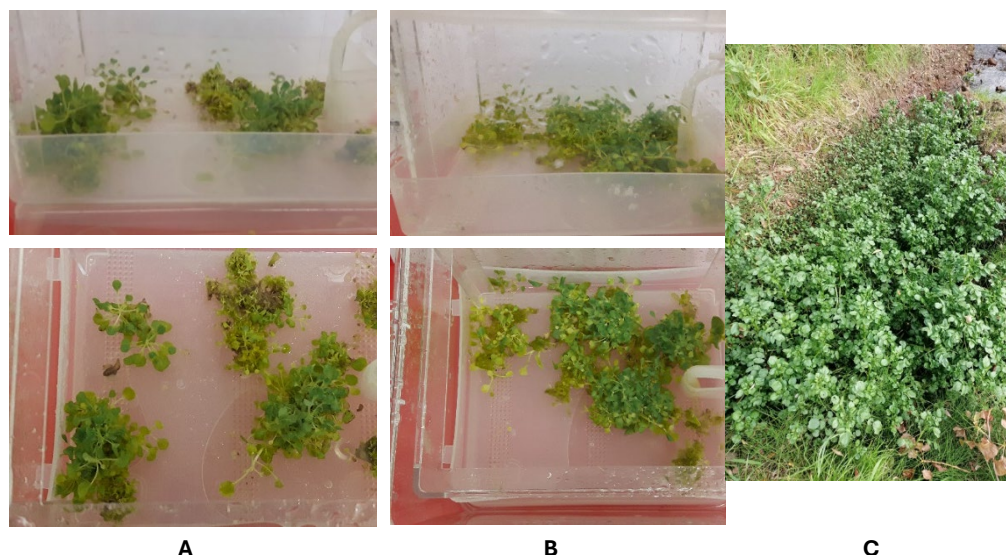


Figure S1. Morphological appearance of *N. officinale* microshoot cultures cultivated in bioreactor PlantForm after 10 (A) and 20 days (B) of growth period; and parent plant (C).

Biomass increments were measured by weighing the dry biomass obtained after 10 and 20 days of the growth period after lyophilization. For dry biomass, the Gi was calculated according to the formula: $G_i = \frac{(Dw_1 - Dw_0)}{Dw_0}$, where Dw_1 is the dry weight of microshoots observed at the end of the experiment, and Dw_0 is the dry weight of the inoculum [1].

High growth index (Gi) values were obtained for the dry biomass. Depending on the culture duration, the increases in dry biomass, expressed by Gi, ranged from 20.13 (after 10 days) up to 31.36 (after 20 days). The Gi estimated for the cultures grown over 20 days was 1.6 times higher than the increase recorded after 10 days.

References

1. Grzegorzczak, I.; Wysokińska, H. Liquid Shoot Culture of *Salvia officinalis* L. for Micropropagation and Production of Antioxidant Compounds; Effects of Triacantanol. *Acta Soc. Bot. Pol.* **2008**, *77*, 99–104, doi:<https://doi.org/10.5586/asbp.2008.013>.