

Symposium | II International Symposium on Innovations in Ornamentals: From Breeding to Market

Tue. Aug 25, 2026 3:30 PM - 5:30 PM JST | Tue. Aug 25, 2026 6:30 AM - 8:30 AM UTC | Room F

[S16-4] Production Systems 1

Chair: Antonio Ferrante (Sant'Anna School of Advanced Studies of Pisa), Takashi Nakatsuka (Shizuoka University)

3:30 PM - 3:45 PM JST | 6:30 AM - 6:45 AM UTC

[S16-4-01] Biostimulants Applications in Organic Ornamental Nursery for Cuttings Rooting

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Keywords : substrati, propagazione, infestanti, nutrizione, sostanze bioattive

The ornamental sector of organic outdoor ornamental plants needs innovative technical means that can improve the sustainability and competitiveness of production companies.

There are numerous difficulties that stand in the way of adopting organic production protocols and the most limiting are the poor availability of certified organic technical means. Pot cultivation is very difficult to manage in an organic regime. Another problematic phase in ornamental nursery is propagation, usually carried out by cutting with the aid of synthetic products with hormone-like action. The aim of this work was to use plant extract such as leaf or flower extracts as biostimulants on rooting of camelia (*Camellia japonica* L.). Cuttings of camelia were dipped in water as control, in 40 mg L⁻¹ Indole-3-Butyric Acid (IBA), solution containing biostimulant solutions (3 or 5 mL L⁻¹) of flower or leaf extract of borage, or in powder of microbial consortia containing mycorrhiza 0.1%, rhizosphere bacteria 10⁷ UFC/g context. Preliminary results indicated positive effects of biostimulants that reached the rooting initiation and establishment earlier than control. Biostimulants performed as the IBA in terms of percentage of rooting and biomass accumulation. These results can support the organic cultivation process for ornamental shrub plants in pots to be used in green spaces.