

Effect of Plant Growth Regulators on Mass Production from Leaf Segment Culture of *Mentha x piperita* var. *citrata*

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A simple protocol has been developed for high frequency plant regeneration from leaf segment culture of *Mentha x piperita* var. *citrata*.

Young leaves were cultured on MS medium containing various combination of 2,4-D, NAA and BA. Callus initiation was only obtained within 2 to 3 weeks on 2,4-D and BA combinations which were tested at concentration ranging from 0.5 mg/L to 3.0 mg/L of each. Compact yellowish callus induced on MS medium with 2,4-D and BA turned dark brown and died after 3 months.

Direct plant regeneration from leaf explants were also obtained.

After about 5 weeks of culture under 0.5-1.0 mg/L NAA and 1.0 mg/L BA, the frequency of regeneration was 100% of explants. Five to six weeks were required to obtain well-rooted plants, which were mostly able to survive after transfer into soil. From a single young leaf of *Mentha x piperita* var. *citrata*, 50-60 plants could be regenerated. This procedure is recommended for its production of homogeneous *Mentha x piperita* var. *citrata*.