

# 诸葛菜若干外植体再生力试验结果 Experimental Results of the Regeneration Ability of Different Explants of *Orychophragmus violaceus*

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**摘要** 用诸葛菜的不同器官、组织作外植体进行离体培养, 测定其再生力, 首次得到下列结果。1. 用诸葛菜子叶切块进行离体培养, 上述外植体产生胚状体, 并再生小苗, 胚状体的发生频率达100%; 2. 用诸葛菜花托进行离体培养, 从花托直接产生小芽, 以后长成小苗, 花托的出芽率为78.2%; 3. 用诸葛菜的花药进行离体培养, 获得了混倍体花粉植株, 诱导率达10%; 4. 用诸葛菜的子叶组织分离原生质体, 原生质体经纯化后在培养基中作液体浅层暗培养, 两周后将细胞团转入扩增培养基, 待愈伤组织长出后, 将其转入分化培养基中即形成完整植株, 分化频率达100%。

**Abstract:** Various organs and tissues of *O. violaceus* were used as explants for in vitro culture to examine their regeneration ability, and the following results are reported for the first time in literature. Cotyledon segments of *O. violaceus*, when cultured in vitro, regenerated embryoids first and then plantlets. The frequency of embryoid production was 100%. 2. The receptacles of *O. violaceus* cultured in vitro, regenerated small buds directly, which later developed into plantlets. The frequency of bud regeneration was 78.2%. 3. Anthers of *O. violaceus*, when cultured in vitro, produced mixoploid pollen plantlets. The induction frequency of pollen plantlets was 10%. 4. Protoplasts, isolated from cotyledons of *O. violaceus* and cultured in vitro, developed into cell colonies, calli and later plantlets. The frequency of plantlet regeneration was 100%.

**关键词** [诸葛菜](#) [植物体细胞遗传学研究](#) [实验材料](#) **Key words** [O.violaceus](#) [in vitro](#) [Experimental material](#) [Plant somatic cell genetic studies](#)

分类号

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## Abstract

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