

从波斯菊幼苗的叶绿素、株高、茎粗、根系活力和植株干重上来看,基质干重与控释肥重量比为 10:1 的处理能明显促进波斯菊幼苗的生长发育。

从试验结果来看,控释肥也并不是施用越多越好,施用量为 117 g(克)时,抑制植株生长,产生烧苗现象,施入控释肥量为 35 g(克)时,育苗效果最好。

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## Effects of Controlled—Release Fertilizer on Plug—Seedling of Calliopsis(*Coreopsis tinctoria*) in Medium

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**Abstract:** The effects of controlled—release fertilizer applied in plug—seedling with medium of calliopsis (*Coreopsis tinctoria*) were studied. The controller—release fertilizer (20—8—10) made by Manufacturing Technologies of Controlled—Release Fertilizers of the National Ministry of Agriculture program were used to study the feasibility of controlled—release fertilizers on Plug—seedling and the optimum amount of fertilizer. Compared with the effects of CRF on calliopsis at different application rates. The results showed that nutrient released from controlled—release fertilizgr and the nutrient absorption of seedlings were similar and reached “supply—demand” dynamic balance. When controlled—release fertilizer application amount was 117 g, the growth of seedlings was restrained. The optimum amount of fertilizer on calliopsis plug—seedling was 35 g.

**Key words:** Controlled—release fertilizer (CRF); Plug—seedling; Medium; Calliopsis

### 冬季温室大棚增光措施

鲁泽广

天气转冷,气温下降。露天培育的观叶、观花植物将陆续移入温室大棚培养至到来年初夏。这一阶段光照是影响其正常生长发育的主要因素。为促使其健壮生长,在生产中要采取相应措施增加棚内光照强度。主要措施有:

**建造合理棚型:**合理的棚型是影响棚内光照强度的重要因素。应建造采光强度大、立柱少、土地利用率比较高的棚型。

**使用优质棚膜:**温室花卉栽培投资大、效益高,选用优质棚膜是高产优质的基础。市场上棚膜种类很多,应选用透光率高、保温性能好、无滴长寿薄膜。

**定期清扫棚面:**每天早上应将棚膜清扫一遍。若人手不够,至少每 2 d~3 d(天)清扫一次。棚膜内壁要经常用干净的抹布擦拭。

**喷施无滴剂:**聚乙烯棚膜特别是普通膜,往往

挂有较大水滴,严重影响棚内透光。喷施无滴剂后可消除水滴,增加透光。

**张挂反光幕:**反光幕是一种镀铝的聚脂膜,具有很高的反光性。通过张挂反光幕可增加棚内的光照强度,改善棚内的光照分布。这种方法投资少、简单易行、见效快。

**延长光照时间:**天气正常情况下,要尽量早揭晚盖草苫以增加光照。阴天的散射光也可增光,只要温度下降不严重就要揭开草苫。

**补充光照:**遇到连阴天会严重影响棚内植物的正常生长,这时就要考虑利用人工照明的方法来补充光照。一般可在棚内悬挂生物效应灯,即可补充光照,又能提高棚内温度。

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