

Study on the Propagation Technique in Vitro for New Varieties of Narcissus tazetta var. chinensis Rome

Hu Yimin

(Forest Research Institute of Zhoushan City, Zhejiang Province)

Que Guoning

(The Research Institute of Subtropical Forestry CAF)

Abstract In this paper, the propagation technique in vitro for the new varieties of *Narcissus* selected from *N. tazetta* var. *chinensis* Rome was reported. In order to conserve germplasm resources of *Narcissus* and achieve the level of mass production, we conducted a series of synthetical systematic experiments for 3 years. The result showed that the bulbils were induced on twin scales on MS medium containing 0~5 mg/L BA, 0~1 mg/L NAA and a little activated-carbon. The percentage of induction reached 70%. More bulblets could be obtained through subculture in the same medium. If the bulbils were transplanted in $\frac{1}{2}$ MS medium with 0.1 mg/L IBA in shade-culture, the rooting rate could be raised in the dark to 79.3%. If in vitro bulbils were cultivated in the field they might flower after 3 years.

Key words *Narcissus tazetta* var. *chinensis*; tissue culture; propagation technique in vitro

“优良薪材树种引种、选种，薪炭林栽培经营技术及多种经济效益研究”通过鉴定

由中国林科院林研所主持，全国12个单位参加的“优良薪材树种引种、选种，薪炭林栽培经营技术及多种经济效益研究”是“七五”国家科技攻关专题。从1984年至1990年，在全国13个试验区、26个试验点共70余人协作攻关，获重大成果：成功地引种国外优良薪材树种；筛选出当地122个适应在各试区发展的最佳薪材树种；找出了在不同立地条件下主要薪材树种速生高产的配套技术措施，提高了单位面积年产薪材量；通过多效研究，提高了薪炭林的经济、生态效益。先后建立试验示范林1134.2 ha，推广面积达5.3万ha。编写了60个树种的《中国主要能源树种》一书。

1990年底，农业部和林业部联合在广西南宁召开鉴定会。专家们认为，该项研究覆盖面广，包括我国主要自然类型区，具有广泛代表性和适用范围；同时从生产实际出发，把现代科学技术与传统经验结合起来，把单项技术进行组装修配，取得了明显的综合效益。此外，在薪炭林产量构成规律等方面，也进行了较深入的理论研究。该成果达到了国际同类研究的先进水平。

(中国林业科学研究院 黄鹤羽)