

จ

อาร์ติโชคสายพันธุ์ Romanesco จะเกิดการแตกกอได้ดีที่สุดบนอาหาร Half MS ที่เติม NAA 0.1 mg/l และ kinetin 2.5 mg/l และสามารถสร้างรากเมื่อเลี้ยงในอาหารที่มี NAA 0.5 และ 2.0 mg/l

มหาวิทยาลัยเชียงใหม่
Chiang Mai University

Thesis Title	Development of Suitable Media for Commercial Production of Globe Artichoke (<i>Cynara scolymus</i> L.)	
Author	Miss Wilasinee Kokluecha	
M.S.	Biotechnology	
Examining Committee	Assoc. Prof. Dr. Prasartporn Smittamana	Chairman
	Lect. Kaewalin Kunasakdakul	Member
	Assoc. Prof. Dr. Danai Boonyakiat	Member

Abstract

The proper micropropagation was studied starting from the *in vitro* germination of the globe artichoke (*Cynara scolymus* L.) seeds. Subsequently, the shoot-tips were excised from the seedlings and cultured on the media which MS (1962) was used as a basic medium. Shoot multiplication occurred through a proliferation of axillary buds and the best multiplication rate of cv. HV 271 was obtained when 2.5 mg/l kinetin and 0.1 mg/l NAA were added to the medium. Almost 66.66 % of *in vitro* shoots produced roots after 4 weeks set on the medium plus 0.5 mg/l NAA and gave 75 % survival rate when transferred to the greenhouse. Shoots of globe artichoke cv. French were subculture on different media. The highest rate of shoot proliferation was induced on MS (1962) medium supplemented with 0.5 mg/l BAP which was better than the other tested cytokinin forms (kinetin, 2-isopentynyl – adenine and Thidiazuron). About 86.66 % of shoots were rooted after 4 weeks cultured on Half MS medium supplemented with 2 mg/l NAA

and 65 % survival rate of rooted plantlets was obtained when transferred to the greenhouse. Moreover, the c.v. Green Globe Improved was found best grown on half MS medium supplemented with 0.5 mg/l IAA and 0.5 mg/l BAP and 40 % of shooting was obtained on half MS medium with 0.5 mg/l NAA added.

Shoots of globe artichoke cv. Nun 6372 and Nun 6374 were subcultured on different media. It was found that MS medium supplemented with 0.5 mg/l BAP gave rise to the maximum shoot formation. The highest multiplication rate of globe artichoke cv. Romanesco was induced on Half MS medium supplemented with 0.1 mg/l NAA and 2.5 mg/l kinetin and rooted when planted on rooting media containing 2 mg/l NAA.