

Effect of medium pH on development and germination
of somatic embryos formed from leaf explant culture
of *Ostericum Koreanum* Kitagawa.

강활 잎절편 배양으로부터 체세포배의 발생 및 발아에
미치는 배지 산성도의 영향

CHO, Duck-Yee^{*}, SOH, Woong-Young¹ · LEE, Eun Kyung¹

^{*}Department of Biology, Woosuk University, Chonbuk, 565-701,
¹Department of Biological Sciences, Chonbuk National University,
Chonju, 561-756, Korea

조덕이* · 소웅영¹⁾ · 이은경¹⁾

*우석대학교 생물학과 · ¹⁾전북대학교 생물과학부

Abstract

In order to clarify the influence of pH on the production, maturation and germination of somatic embryos, the leaf explants of *Ostericum Koreanum* were cultured on medium with various pH levels. In the culture of low pH (pH 4.3), the production of somatic embryos was enhanced and the cotyledon variation of somatic embryos were nearly similar to control. In addition, the germination of somatic embryos developed on medium of low pH level was improved. Especially the germination frequency of cup-shaped embryos was prominently improved (67%) in comparison with that in medium pH of 5.8. But the culture on medium of low pH level led to the inhibition

of somatic embryo maturation. Therefore it is suggested that the culture of leaf explants on medium of low pH level was favored for somatic embryo induction and the transfer of developing embryos on medium of pH 5.8 level promoted the maturation and germination of somatic embryo.