بخشی از ترجمه مقاله

عنوان فارسی مقاله:
کشت های ریشه مویین و بازسازی گیاه در Solidago nemoralis ترنسفورم شده با آگروباکتریوم ریزوزنس

عنوان انگلیسی مقاله:
Hairy Root Cultures and Plant Regeneration in Solidago nemoralis Transformed with Agrobacterium rhizogenes

توجه!
این فایل تنها قسمتی از ترجمه می‌باشد. برای تهیه مقاله ترجمه شده کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک نمایید.
4. Discussion

*A. rhizogenes*-mediated genetic transformation in plants is a well established procedure which produces hairy roots at the site of infection by altering the endogenous auxin:cytokinin ratio in the plant cell [8, 9]. Additionally, it is well documented that, once established, hairy roots can be cultured on hormone-free medium [10]. *S. nemor-alis* hairy roots were easily established and then cultured both in solid and liquid hormone free medium.

Although shoot regeneration occurred spontaneously in hormone-free media, it occurred only at low frequency. Additionally, introducing exogenous NAA and BA led to no improvement in shoot regeneration. However, application of NAA alone on *S. nemoralis* hairy root cultures showed a positive effect on shoot regeneration. These results go against the notion that higher levels of cytokinin (in the auxin:cytokinin ratio) are necessary for shoot regeneration although it has been reported that *A. rhizogenes* transformed plants can regenerate shoots in the presence of only auxin, presumably due to the cytokinin mimetic effect of the over expression of the rolC gene, present on *A. rhizogenes* Ri plasmid [11].