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## Genetic transformation of oriental *Cymbidium* by a modified *Agrobacterium* infection method

Kim hye joun, Shin sang hyun, Chung young soo<sup>1</sup>,  
Shin jeong sheop<sup>2</sup>, Pak chun ho<sup>3</sup>, Lee jong suk<sup>4</sup>

<sup>1</sup>Dept. of Bioresources, Dong-A Univ., Pusan 604-714, Korea <sup>2</sup>Dept. of Hort. Sci., Korea Univ., Seoul 136-701 <sup>3</sup>Graduate school of Biotech., Korea Univ., 136-701  
<sup>4</sup>Dept. of Hort., Seoul Women's Univ., Seoul 139-744, Korea

### 아그로박테리움을 이용한 동양란 형질전환

김혜정, 신상현, 정영수<sup>1</sup>, 신정섭<sup>2</sup>, 박천호<sup>3</sup>, 이종석<sup>4</sup>

<sup>1</sup>동아대학교 생물자원, <sup>2</sup>고려대학교 생명공학원, <sup>3</sup>고려대학교 원예과학,  
<sup>4</sup>서울여대 원예과학

Genetic transformation of oriental *cymbidiums*(*C. lancifolium* and *C. kanran*) was performed to create high value of variants from the species. An expression vector(pAT6K) containing transposable element, known to bring about mutation in the plant genome, was introduced into *Agrobacterium tumefaciens* LBA4404 and used for genetic transformation of oriental cymbidium with a modified transformation method. In the method rhizomes were precultured for 3days or 7days in MS liquid media (0.5mg/l activated charcoal, 0.1mg/l NAA, and 0.5mg/l BA). For efficient wounding into meristem tissue seasands were added into the precultured rhizomes in flask and wounding has been proceeded for 2 or 4 days, respectively. After wounding, the rhizomes were co-cultivated with actively-grown *Agrobacteria* harboring pAT6K for 3 days and washed out. The Agro-infected rhizomes were placed on solid MS media supplemented with two different hormone combinations, 0.5 mg/L BA + 0.1mg/L NAA for *C. lancifolium* and 1mg/L BA + 1mg/L NAA for *C. kanran*, respectively. GUS expression was analyzed to confirm whether appropriate genetic transformation was carried out. Gus assay revealed that 7-day preculture and 4-day wounding was more efficient for transformation.