

**F-F1-85****Landscape ecological habitat structure of eleven Ranunculaceae plants****Shin-Ho Kang<sup>\*</sup> and Pyeongjae Lee**Department of Natural Medicine Resources,  
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This study was conducted to clarify the distribution patterns and landscape ecological structure of habitats of eleven species in Daejeon, and provide basic information for conserve these plants. Floristic compositions of habitats were mainly composed of *Quercus mongolica* community. *Aconitum pseudo-leave var. erectum* was soils of mesic, loamy skeletal, slope of more than 35°, sixty percent of woody coverage at 460-520m and 25m away from drainage. *Clematis manshurica* was soils of loamy skeletal, mesic, under 580m, steep upland area. *C. terniflora* was soils of coarse loamy, mesic, over 290m, flat upland area with less than 20° slope. *C. apiifolia* was soils of loamy skeletal, mesic, 300-500m, steep slope upland area with less than 60°, Vegetation rating was spare (less than 15%) woody cover. *Ranunculus sceleratus* was soils of coarse loamy, mesic, less than 250m, flat upland area with less than 20°. *R. japonicus* and *R. chinensis* were soils of coarse loamy, mesic, less than 210m, flat upland area with less than 30°. *Thalictrum aquilegifolium*, *T. filamentosum* and *T. uchiyamai* were soils of loamy skeletal, mesic, less than 450m, flat upland area within 30°. Distribution patterns of these species were shown on the 1km x 1km grid map.

**F-F1-86*****In Vitro* Bulblet Induction and Plant Regeneration from Bulb Scale Culture of *Lycoris flavescens* M. Kim et S. Lee. var. *uydoensis* M. Kim**

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A system for multiple bulb scale formation and plantlet regeneration from bulb scale explants of *Lycoris flavescens* M. Kim et S. Lee. var. *uydoensis* M. Kim cultured on MS medium containing IBA/BA, NAA/BA and 2,4-D/BA was established. Explant site of bulb scale and plant growth regulators significantly affected on callus and bulblet induction. Distal part with disk was the best region to induce the callus and bulblet, induced callus led to bulb, shoot and root formation.

Explants on medium with IBA/BA produced higher number of bulb scales than with 2,4-D/BA and NAA/BA. Eighty percent of explants was produced when explants were cultured with a combination of 3.0 -5.0 mg·L<sup>-1</sup> IBA and 3.0 -5.0 mg·L<sup>-1</sup> BA for 60 days. The highest number of bulb scale (3.0 to 5.5 bulb scales per explant) was obtained when explants were treated with a combination of 4.0 mg·L<sup>-1</sup> IBA and 4.0 mg·L<sup>-1</sup> BA for 60 days culture. The number of shoots formed from the bulb scales by transferred to the medium with 4.0 mg·L<sup>-1</sup> IBA and 4.0 mg·L<sup>-1</sup> BA. Bulb scale disks formed roots in MS medium without plant growth regulators. A total of 65 plants were regenerated from explants, morphological abnormalities were not observed among regenerated plants. Regenerants were transferred to the pot and grown to maturity.

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