

희귀식물 너도바람꽃(*Eranthis stellata* Maxim.) 종자의 형태특성 및 휴면유형 분석

채인환¹, 유건희¹, 송세규², 김진우³, 강기호⁴, 이하양^{1*}

¹국립백두대간수목원 시드볼트운영센터, ²국립백두대간수목원 산림생물자원보전실,

³경상북도수목원, ⁴국립백두대간수목원 백두대간보전부

Seed Morphological Characteristics and Dormancy type of *Eranthis stellata* Maxim., Korea Rare Plant.

Inhwan Chae¹, Geon Hui Ryu¹, Se-kyu Song², Jin-Woo Kim³,
Gi Ho Kang⁴ and Hayan Lee^{1*}

¹Seed Vault Center, Baekdudaegan National Arboretum

²Forest Bioresources Conservation Division, Baekdudaegan National Arboretum

³Conservation Research Team, Gyeongsangbuk-do Arboretum

⁴Baekdudaegan Bioresources Conservation Department, Baekdudaegan National Arboretum

Eranthis stellata Maxim. is a perennial plant that grows around the valley. *E. stellata* is concerned about the decline in natural habitats due to climate change in KOREA, continues to be observed and protected as an endangered species (Least Concerned, LC). Nevertheless, studies on the characteristics of the seeds of *E. stellata* are insufficient. So, this study analyzed the morphological characteristics and dormancy types of seeds. Seeds of *E. stellata* was collected in April at Gyeongsangbuk-do Arboretum and kept at 5 °C until using. To investigate the morphology of seeds, an optical microscope and a scanning electron microscope (SEM) were used. GA₃ treated or untreated seeds (4 replicates of 25 seeds each) were observed germination and embryo growth for 1 month at 5 °C and 25/15 °C (12h day/12h night). The seed surface of *E. stellata*, light brown, was observed as a common characteristic of *Eranthis* genus, reticulate. The short axis of seeds was 1.11~1.77mm (average 1.44mm), and the long axis was 1.27~1.91mm (average 1.63mm), which was investigated in a slightly round shape (subglose). While no germination was observed at all conditions, Embryo growth was observed at 5 °C both in the control group and with GA₃treated groups. Thus, seeds of *E. stellata* are classified as morphological physiological dormancy (MDP), which requires embryonic development and dormant break at the same time. These results can be useful information for determining morphological physiological seed dormancy and germination, and will be an important basic data for seed propagation of *E. stellata* as a resource.

[본 연구는 「경상북도수목원(보존구역) 중점관리대상종 현지 내·외 보전방안 연구용역」의 지원에 의해 이루어진 결과로 이에 감사드립니다.]

*(Corresponding author) E-mail: white@kiam.or.kr, Tel: +82-54-679-0960