

It was built as a 40 m underground tunnel and, as a national security facility, access is restricted. Unlike the seed bank, it is completely filled with deposited seeds and currently, a total of 4900 species in 138 363 accessions of domestic and foreign seeds are preserved in duplicate. This study was carried out with the support of the 'R&D Program for Forest Science Technology' (Project No. 2021399B10-2125-CA02) provided by the Korea Forestry Promotion Institute.

Seed quality assessment of wild plants

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It is important to maintain seed quality during storage in the seed bank so that the seeds are safely stored for future use. Baekdudaegan National Arboretum (BDNA) in South Korea is a one-of-a-kind global institution that has both a seed bank and a seed vault for the conservation of wild plant seeds. For the safe preservation and quality assessment of wild plant seeds, the state of the seeds from collection to storage is checked, and a management manual for each species is developed to sustainably maintain seed quality. Information regarding the seeds stored in the wild plant seed bank of the BDNA is collected at each accession, including details of collection history, specimen information, thousand-seed weight, relative humidity, moisture content, filling rate, germination rate, viability (tetrazolium test) and germination rate with gibberellic acid treatment. In addition, for safe storage and use, research is being conducted on storage characteristics, seed longevity, dormancy types and dormancy breaking methods. In 2021, seed information was established on 512 species and 905 accessions stored in 2020. Up to July 2022, information on 613 species and 1271 accessions stored in 2021 has been established. This study was carried out with the support of the 'R&D Program for Forest Science Technology' (Project No. 2021399B10-2125-CA02) provided by the Korea Forestry Promotion Institute.

Investigation on storage potential of camelina (*Camelina sativa* L.) seeds

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Camelina is considered almost as a new oil crop worldwide due to its resistance to drought, salinity, cold stresses and pests, compared to oilseed rape. Investigations of different aspects of the crop including seed storage potential are needed. Therefore, the effects of seed moisture content, temperature and storage periods were studied for seed storage potential. The seeds were stored in sealed aluminium bags during storage periods. At the end of the storage periods seed germination was assessed as well as vigour using both radicle emergence (RE) and electrical conductivity (EC) methods. In general, with increasing seed moisture content, temperature and period of storage, final germination and the number of normal seedlings decreased, with the lowest germination of 73% and 60% normal seedlings at 16% seed moisture content, 22°C stored for 5 months, compared to 100% both for germination and normal seedlings before storage. In the above treatment mean germination time (MGT) of 3.99 days and EC of 195 micro-Siemens cm⁻¹g⁻¹ were achieved,