

**SEED GERMINATION ENHANCEMENT OF EUROPEAN HOPHORNBEAM
(*Ostrya carpinifolia* Scop.)**

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ABSTRACT

In this study; it is investigated to prove the effects of the different treatments (stratify, the type of hormone, the dosage of the hormone, and hot water.) on the seeds of *Ostrya carpinifolia* Scop. which originated Kayacık Gene Protection Forest named Cide-Şehdağ in Western Blacksea Region in Turkey.

The seeds of the European hophornbeam used in the survey are stabled to be 1000 TA, and 7,06gr. Different types of hormone and dosages, storage in hot water and controlling processes were applied to the seeds that had been harvested from the Kayacık Gene Protection Forest in 2006 and 2007; in both harvest year; the rate of germination average was higher in hormone processes than hot water and controlling processes. Furthermore, it was found out in 2006 harvest year that stratified seeds in hot or cold water increase the rate of the germination when compared the seeds that hadn't been stratified.

While the most suitable combination of the types of hormone and different dosage processes, was found out 800 ppm GA₃ (78.200%) with the unstratified seeds of year 2006; this rate was found out 800 ppm GA₃ (58.200%) with the unstratified seeds of year 2007.

It was found out by the experiments which were done after stratification that applying 600 ppm GA₃ (72.100%) provides the highest germination rate and process was followed by the application of 800 ppm GA₃ (59.500 %).

Key Words: *Ostrya*, phtohormone, germination, seed