

**A Study of the Growth and Development of the Root System
of *Corylus maxima* Mill. In Absheron Condition.**

Elmira SAFAROVA

Central Botanical Garden of ANAS, Azerbaijan, Baku
e_safarova@hotmail.com

Objective of the study: To study the growth and development features of the root system of 1-3 year old seedlings of *Corylus maxima* Mill. Obtained by germination of seeds taken from the flora of Azerbaijan (Oguz region) and introduction into dry subtropical conditions of Absheron.

Material and methods: The material of the study was the introduced species of large fruited hazel - *C. maxima* Mill. the genus *Corylus* L. belonging to the family of Rosaceae. Morphology and the growth features of the roots of the studied species was investigated by methods of digging and washing them which recommended by V.A Kolesnikov and I. N. Rakhteenko. Particular attention was paid to the structure of the root system, the number of lateral roots, the diameter of the root neck, the length of the main and lateral roots, the depth of bedding, etc. Digging of the roots of 1-3 year old plants was carried out at the end of the vegetation period (November).

Result: The conducted experiments in the plots of the Central Botanical Garden of the National Academy of Sciences of Azerbaijan showed that in Apsheron condition *C. maxima* 1-3 year old seedlings root system structure parameters was as following: height of 9-33 cm, root neck diameter 0.3 - 1.2 mm, main root penetrates deep into the soil 10-60 cm, the lateral roots 3-38 cm, the number of lateral roots 15 - 50 pieces. The lateral roots begin to form 3-5 days after their appearance. As the root system was formed, intensive growth of the aboveground organs is observed. As seen, along with the stem root, the studied species has a large number of lateral roots, which is necessary for extracting the moisture from both the lower and upper layers of the soil. The main mass of the roots is located at a depth of 2-11 cm, which makes it possible to cultivate them as fruit plants, and during landscaping works, it is easy to replant different-aged plants.

Acknowledgments: I would like to express my thanks to the administration of the Botanical Garden of the National Academy of Sciences of Azerbaijan for financial support in carrying out this work.

Key words: hazel, seedlings, root, growth, development