



BIOECOLOGICAL PROPERTIES OF AKMELLA OLERACEAE (L.) R.K.JANSEN UNDER INTRODUCTION CONDITIONS

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Relevance: For the treatment and timely prevention of diseases, medicinal plants containing bioactive substances are used to obtain pure preparations. *Akmella oleraceae* is one of the medicinal plants containing bioactive substances. *Akmella oleraceae* (L.) R.K.Jansen is an annual herb belonging to the Asteraceae family. The plant reaches a height of 30 cm, is well branched, and forms a tuft of flowers reaching 2 cm at the ends of the branches. Preparations from its raw materials are used as an anti-inflammatory agent for tuberculosis, colds, coughs, rheumatism and in medicine. In the treatment of toothache and stomatitis, in cosmetology due to the presence of spilanthal, it is used as an anti-wrinkle agent on the face, and has anesthetic and analgesic properties. Young leaves of the plant are added to various salads, give a pleasant taste to stewed meat products. Spicy sauces and spices are prepared from crushed dried leaves. Based on the above properties of this plant, it is important to introduce the plant *Akmella oleraceae*, which is rich in biologically active substances, to local conditions.

Research objective: The purpose of our scientific research is to study the bioecological properties of *Akmella oleraceae* and its biomorphology under introduced conditions.

Methods and techniques: GOST 203666 and M.K. Firsova method are used to determine the seed germination of *Akmella oleraceae* seeds in laboratory and field conditions. The biomorphological properties of the plant are studied by the methods recommended by T.A.Rabotnov, I.G.Serebryakov.

Results: Seed germination of the *Akmella oleraceae* plant was determined in laboratory conditions before sowing in the field. 25 seeds were sown on filter paper moistened with distilled water in a Petri dish. To ensure the accuracy of the experimental results, the seeds were sown 4 times in a reverse order at a temperature of 22-25°C. The seeds began to germinate 3 days after sowing, and 87% germination was determined within 10 days. In early spring, in the first decade of March, 2-3 seeds were sown in pots filled with biohumus soil to prepare vegetable seedlings. When the air temperature was 20-23°C, the seeds sown in pots began to germinate. 14-18 days after seed germination, in early April, true leaves began to form on the plants, and the seedlings averaged 2-3 cm in height. By the end of the month, the plants reached a height of 4-5 cm and 4-5 leaves were formed. The seedlings were planted in the experimental plot when they had 5-6 leaves. In May, the growth and development of the plants slowed down slightly, and in June the number of leaves on the plant was 6-7, and their height was 8 cm. The leaves of the plant were dark green, entire, slightly elongated, and located opposite on the stem. By the end of July, the plants were 13-15 cm tall, well branched, and had formed up to 7-8 side branches. During this month, rapid growth of the plants was observed. By the first decade of August, the generative period of the plants began, and buds were formed. In the second decade of the month, the flowering period was observed, and the first flowers began to open. At this time, the height of the plants reached 16-18 cm. In the end of August and the first decade of September, the plants began to bloom profusely. In September, the height of the plants was on average 24-26 cm, the number of side branches was 15-19 and their length was 13-16 cm, and



the length of the large leaves was 4.5-6.0 cm. The length of the inflorescences on the plant was 1.5-2.0 cm, the diameter was 1.2-1.5 cm, and up to 30-35 inflorescences were formed on one plant. In the first decade of October, the seeds ripened. In September, October, and November, budding, flowering, and seed ripening were observed simultaneously in the plants.

Conclusion. The *akmella oleraceae* plant was observed to complete its growing season in local conditions, which indicates that the plant is well adapted to the conditions of Tashkent.