

**PP43. INFLUENCE OF PRE-SOWING TREATMENT WITH
BIOSTIMULANTS ON YIELD OF PHYTOMASS OF ASTRAGALUS
BABATAGI AND ASTRAGALUS XANTHOMELOIDE**

E.R. KURBANOVA^{1*}, B.Z. ERGASHEV², Ch.A. KHOLMURADOV², R.P.ZAKIROVA¹

¹ Acad. S.Yu. Yunusov Institute of the Chemistry of Plant Substances AS RUz st.
Mirzo-Ulugbek, 77, 100170 Tashkent

² Research and Production Center for the cultivation and processing of medicinal
plants under the State Committee for Forestry of the Republic of Uzbekistan

*Corresponding Author. E-mail: ilichkakurbanova@mail.ru

Currently, not only in crop production but also in the crops of medicinal plants, biostimulants are increasingly being used. It is known that biostimulants can influence important physiological processes in plant life: rooting, acceleration of photosynthesis, growth, and development, acceleration of early flowering, increase in the number of flowers, fruit ripening, etc.

Most species of the genus *Astragalus* are a valuable source of biologically active substances, in turn, their accumulation occurs both in the aerial parts and in the roots of plants.

The research aimed to study biostimulants for the accumulation of plant phytomass *A. babatagi* and *A. xanthomeloides* in the conditions of the Tashkent region.

The work was carried out in the Quyichirchik district of the Tashkent region in 2023. The analyzes were carried out on *A. babatagi* and *A. xanthomeloides* plants grown from seeds treated with biostimulants Uchkun plus and Potassium Humate Souffler. The harvesting of raw plant phytomass was carried out in the phase of intensive flowering. Pre-sowing treatment in *A. babatagi* crops provided an increase in the yield of raw biomass in the "scarification + Uchkun plus" experiment by 25.2%, in the "scarification+ Potassium Humate Prompter" option by 17.3% relative to the "scarification" option. The increase in the biomass yield of *A. xanthomeloides* in the variant of the experiment "scarification + Uchkun plus" was 15.8% and "scarification + Potassium humate Prompter" - 17%, respectively.

As our studies have shown, the use of pre-sowing seed treatment of *A. babatagi* and *A. xanthomeloides* with biostimulants Uchkun plus and Gumat potassium Souffler contributed to an increase in the yield of raw plant phytomass.