

The work is devoted to the determination of heavy metals accumulation in different varieties of annual lupin according to the content of the given metals in soil.

The investigations of heavy metals were conducted on the following varieties of an annual lupin – Dikaf I, SN 40\9, Nemchinovskij 846, Zhemchug, Narrow–leaf 109. The botanical garden soils taken at the places of lupin growing have been also studied. As a result of our investigations it was established that the content of Pb, Zn, Ni, Mn, Cr doesn't exceed maximum permissible concentration (MPC). While the amount of Co, Fe and Cu exceeds it.

The examined soils according to their metals content may be considered as contaminated (polluted). Together with heavy metal content there were defined some mobile kinds of metals.

According to our investigation we may say that none of the heavy metals in their mobile form exceeds MPC.

According to investigation of heavy metal accumulation in plants we may say that Dikaf I variety has the greatest number of Pb in its root, stem, leaves and the exceeding of this element normal quantity should be noted. Every examined lupin variety has exceeded MPC on Ni (in stem, leaves and root). The Narrow–leaf 109 variety (stem, leaves and root), mutant form of CH 40\9 variety (root) have the exceeded MPC on Fe. All examined varieties of plants have MPC on Cu and Cr.