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**QUALITY AND PROPERTIES CROP EVALUATION OF WHITE  
LUPIN SEEDS OF DIFFERENT PHASE RIPENESS**

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**Annotation.** The purpose of the research was to study the influence of ripening phases on the formation of sowing qualities and yield properties of white lupine seeds. The object of the study is sowing and its yield quality. Subject of study: white lupine seeds of different harvesting time. There are six stages of lupine seed maturation, each of them has been sampled. Seeds of lupine studied: Serpnevyyi, Veresnevyyi, Makarivskyi, and Chabanskyi. The evaluation of the seed sowing qualities was carried out in laboratory conditions; and the study of crop properties – next year at special sites, where seeds of different harvesting periods were singled out, separately lateral and central brushes. Significant dependence of quality of sowing material on the stages of ripeness is detected. For most seeds varieties, the highest indices of laboratory and field similarity of central brushes were obtained in the "Yellow cotyledons" phase (93,3 – 97,6% and 90,2 – 94,2% respectively), and lateral brushes – 1 "Total maturation of seeds" (89,7 – 92,6% and 84,9 – 88,6%). Plant survival also significantly increased with the degree of seed ripeness and was at the offspring of the sixth harvesting time to 93,6%. The productivity of seeds of the first three phases of ripeness, especially the lateral brushes, was low, no more than 10,1 g. The best seed yields were from the sixth harvesting time. The yields of the first harvesting time are very low and range from 1,01 to 1,56 t/ha (central brushes) and from 0,02 to 0,03 t/ha (lateral brushes). The maximum yield (the central bunches is 4,25 – 4,73 t/ha; the lateral bunches are 3,05 to 4,01 t/ha) obtained from most varieties starting with offspring and ending with the full-fruited phase. Thus, the seeds of the first three harvesting periods are not suitable for sowing,

because due to low quality it is impossible to provide a complete ladder in the field, and in the future a viable, productive offspring. To obtain a future high yield harvesting should be carried out, starting not earlier than the ripening phases "Yellow cotyledons", when the seeds have formed high crop quality and crop properties.

**Key words:** white lupine, seeds, ripening phases, harvesting time, sowing qualities, crop properties.