P-54 (154) THE EXPERIMENTAL DEVELOPING AND SYNTHESIS OF NEW TYPES AND HYBRID FORMS IN GENUS LAVANDULA

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The cytogenetic aspects of sterility in allogaploid hybrids of lavender in the crossbreeding of Lavandula angustifolia Mill. and L. latifolia Medic was considered in current work. The specific methods for the production of fertile distant lavender hybrids have been shown. Possible methods for the production of hybrids with minimum quantity of the L. latifolia genetic material have been developed using the allopolyploid forms as the intermediary ones. In this work, morphobiologycal anatomic and cytogenetic characteristics of initial and synthesized forms have been given. The typical diagnostic signs for an accelerated indication of forms have been found. Two types of lavender which have a high interest for the selection have been transformed to the tetraploidal level. For the first time 15 auto- and allopolyploid forms of lavender with different numbers of genomes L. angustifolia and L. latifolia have been synthesized in the-different combinations. A good crossbreeding with allo- and autopolyploid forms allows to get the hybrid forms of layender with different genome ratios, that gives the opportunity to to weaken or strengthen the complex of features of one or another component by crossbreeding. Using an example of the crossbreeding: L angustifolia x L. latifolia (AL, 2n=48), (AALL, 2n=96), (AAL, 2n=72). (AAAL, 2n=96) with the following ratios of genomes 1:1, 1:2, 1:3, 2:2. It has been shown the direct dependence between the increasing number of genomes of L. angustifolia and its features, both quantitatively and qualitatively.

Keywords: Lavandula sp, hybrid, genome, allopolyploid forms, selection

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