Original article

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Features of Various Sterilization Modes of Explants of *Chaenomeles* Lindl. Cultivars at the Stage of Introduction into *in vitro* Culture

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Abstract. *Chaenomeles Lindl. is a valuable crop for landscaping populated areas of Russia, with a large number of ornamental varieties and forms. Use the clonal micropropagation method is advisable for mass production of healthy and genetically uniform planting material, with obtaining an aseptic culture as an important stage. The article presents the results of studies on clonal micropropagation of Chaenomeles plants of 7 varieties of foreign selection (Ch. japonica – Cido; Ch. speciosa – Brilliant, Pink Storm; Ch. superba – Andenken an Karl Ramcke, Fire Dance, Jet Trail, Red Joy) and 7 selected hybrid forms of Russian selection at the stage of introduction into in vitro culture. Studies on clonal micropropagation of plants were carried out on the basis of the Russian State Agrarian University – Moscow Timiryazev Agricultural Academy. Most effective for sterilization of Chaenomeles explants (viability is 80–90%) is to use: 0.2% solution of silver nitrate for 20 minutes – for 5 varieties (Andenken an Karl Ramcke, Brilliant, Cido, Fire Dance, Jet Trail) and 2 hybrid forms (No. 5, 14), for 15 minutes – for 3 hybrid forms (No. 2, 3, 15). Quite effective in sterilizing explants of all studied Chaenomeles varieties of and 5 hybrid forms (No. 1, 2, 3, 4, 15) is the use of a 0.1% solution of corrosive sublimate for 15 minutes (viability – 72–85%), for 5 varieties (Andenken an Karl Ramcke, Brilliant, Cido, Fire Dance, Pink Storm) and 3 hybrid forms (No. 5, 14, 15) – 5% solution of Lysoformin 3000 for 20 minutes (74–87%), for 2 varieties (Andenken an Karl Ramcke, Brilliant) – 30% solution of hydrogen peroxide for 20 minutes (80–82%).*

Key words: *chaenomeles, beautiful flowering shrubs, cultivar, clonal micropropagation, in vitro, explant, sterilization, viability.*

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