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Phytochemical studies on Limonium myrianthum growing in Kazakhstan

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- Congress Abstract

Plants of the genus *Limonium* (Plumbaginaceae family) are represented by 300 species world-wide and 18 in Kazakhstan. Two species L. gmelinii and L. myrianthum are held in stocks exceeding 50 thousand tons in Kazakhstan. The first plant Limonium gmelinii was intensively investigated. Therefore, the object of our research is to study *Limonium myrianthum* as a promising source for potential biologically active compounds of Kazakhstan origin. Sixteen compounds of various natures (flavonoids, catechins and their glycosides, sterols, hydroxylaed dihydrostilbenes, and polysaccharides) were isolated from this plant. Six compounds: 4,4'-dihydroxydihydrostilbene, myricetin-3-O-a-L-arabinoside, myricetin-3-O-β-D-glucopyranoside, 6"-galloylmyricetin-3-O-β-D-glucopyranoside, 3,5,7,3',4',6'-hexahydroxyflavone-3-rhamnoside and β -sitosterol-3-glucoside were found in this plant for the first time. The structures were established by NMR studies and comparison with the literature data. 3,5,7,3',4',6'-hexahydroxyflavone and epigallocatechin gallate are reported to have wide spectrum of biological activity, such as antibacterial, and antioxidative as well as antiallergic properties, respectively. Antioxidant activity of the isolated compounds was comparable to that of a-tocopherol.