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Ecdysteroids from Ajuga reptans L.

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We investigated the ecdysteroids composition. in *Ajuga reptans L.*, that grows within subzone conditions of the middle taiga in the Russian European North-East in the northern border of its area. The sum of ecdysteroids was isolated from the intact plants by means of the following methods: extraction by methanol, treatment of the given extract by hexane RP-chromatography on sorbent C16 (BioChemMac). Individual compounds were isolated and identified with the help of preparative HPLC and mass-spectroscopy. Among them the structure of 7 ecdysteroids were proved: polypodine B, 20-hydroxyecdysone, 29-norcyasterone, 29-norsengosterone, sengosterone, ajugalactone that are characteristic for this plant species. Ajugasterone B was discovered in this plant species for the first time.

The seasonal dynamics of ecdysteroids in *Ajuga reptans* was studied. It was found that young unrooted rosettes, generative organs and winter-green leaves contain maximal amount of ecdysteroids. The connections between ecdysteroids profile and biological particularities of this plants species are discussed.