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VARIANTS OF GENERATIVE SHOOTS OF BOREAL WILLOW SPECIES (*SALICACEAE*)

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Abstract. The structural and functional organization and dynamics of the development of generative shoots in boreal willow species have not been sufficiently studied yet, which determined the aim of the study. The structure of spring generative shoots of regular renewal and summer secondary flowering generative shoots was examined in 16 species of boreal willows. Attention was paid to the time of the appearance of generative shoots, the length, the degree of vegetation and the duration of the vegetative zone. In *S. myrsinifolia*, the location of male and female flowers in bisexual inflorescences and the location of generative shoots (male, female, and bisexual) in the plan shoot system were revealed. The study found that the examined willow species can develop, in addition to generative shoots of regular renewal, secondary flowering generative shoots. Generative shoots of regular renewal are divided into single-stage falling (*S. caprea, S. vinogradovii, S. gmelinii, S. acutifolia, S. viminalis, S. aurita, S. lapponum*), two-stage falling (*S. alba, S. euxina, S. triandra, S. cinerea, S. myrsinifolia, S. starkeana, S. rosmarinifolia, S. myrtilloides*) and conditionally non-matching (*S. pentandra*). Among the secondary flowering generative shoots, 5 variants were identified, differing in the length and variety of the vegetative zone. Secondary flowering generative shoots can be divided into summer and late summer shoots according to the time of appearance. In the same species, generative shoots of regular renewal and secondary flowering generative shoots may differ in the structure of the vegetative zone. In *S. myrsinifolia*, male, female, and bisexual inflorescences can form on the same plant, while generative shoots with male inflorescences develop from both wintering buds and dormant buds. Polymorphism of generative willow shoots is determined by the degree of vegetation and duration of the vegetative zone, the time of formation of generative shoots, the formation of not only unisexual, but also bisexual inflorescences.

Keywords: *Salix,* Salicaceae, generative shoots regular growth, secondary flowering, single-stage-falling, two-stage-falling, conditionally non-falling, unisexual and bisexual

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