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INTERRELATION OF THE CHEMICAL COMPOSITION OF THE GROUND COVER, LITTER AND SOILS IN THE CONIFEROUS-BROAD-LEAVED FORESTS OF THE LOW-MOUNTAIN OF THE MIDDLE URALS

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Abstract. A fir-spruce-linden herbs forest and fir-spruce tall herbs forest on brown mountain soil in the Visimsky State Natural Biosphere Reserve were studied. In each type of forest, the biodiversity and variability of the chemical composition of ground cover and litter plants in different seasons were studied, and the relationship between the chemical composition of plants and the chemical composition of soils was assessed. Found that in spring the content of Fe, Cr, Rb, Ti, Zn, Ni, Al, S and P in the ground cover is higher, and by the end of the growing season the content of Mn, Sr, Ca, K, Mg and Cl increases. Ground cover plants of the studied forests contribute to the accumulation of Fe, Al, Mg, Ba, Ti, Mn, Ni, Cr and Zn in the soil due to their concentration in roots. In the chemical composition of the litter of the fir-spruce-linden herbs forest, the content of Ca, S, Sr, Ba, Mg, Fe, Ba, and Ti is higher than that of the fir-spruce tall herbs forest, which is reflected in the increase in the content of these elements in the organic horizon of the studied soils.

Keywords: fir-spruce forest, ground cover, chemical composition, soil, litter

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