

**STRUCTURAL ASPECTS OF ESSENTIAL OIL ACCUMULATION
IN THE PETALS OF SOME *ROSA* (ROSACEAE) SPECIES
AND MYCELIUM OF *EREMOTHECIUM* (EREMOTHECIACEAE)**

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SUMMARY

The conducted study demonstrated that the glandular epiderm cells and endogenous oblong cavities located in the layer of parenchyma and containing the drops of essential oil were the secretory structures in *Rosa* L. genus species. The small cavities that were submerged deep within the petal were characteristic to collection plants with low content of essential oil. The synthesis of essential oil in *Eremothecium* species is closely related to the active cell functioning that is manifested by the increase of spherosome number and filling of vacuoles with osmiophilic substance similar to the *Rosa* genus species. The secretion of volatiles to the environment is one of the regulatory functions of their synthesis («mechanism of overflow» of excretion of secondary metabolites).

Key words: essential oil, oil accumulation, spherosomes, secretory structures, *Rosa*, *Eremothecium*.