

The mycelial fungus *Ashbya gossypii* is an industrial producing agent for riboflavin [1].

In order to find the capacity of this microorganism for synthesizing odoriferous substances, strain BKMf-1398 of the fungus was cultivated on fermentation nutrient media [2,3] containing sources of carbon (glucose) and of nitrogen (peptone and yeast extract) and mineral salts in flasks on shaking machines at 150 rpm and $28 \pm 1^\circ\text{C}$ for 48 h.

The essential oil was obtained from the culture liquid by steam distillation, and the extractive substances by three extractions with diethyl ether. At a yield of dry biomass of the fungus of 0.9-1.4 g/liter of culture liquid the yield of essential oil amounted to 109.1-113.2 ml/liter and that of extract to 105.4-112.7 mg/liter. The amount of odoriferous substances was determined gas-chromatographically by the method of internal standardization, their total amount being 74.9-81.6% on the mass of the essential oil and 57.6-68.3% on the mass of the extract.

The main odoriferous components were identified in the extract by the GLC method (% on their sum): linalool, 0.2-0.6; citronellol, 0.3-3.0; nerol, 0.1-1.1; geraniol, 55.7-69.7; β -phenylethanol, 25.1-38.6. In addition, it was observed that during the cultivation of the mycelial fungus 61.1-72.3% of extractive substances was secreted into the aqueous nutrient medium, 93.4-94.4% of their total being odoriferous substances.

It must be mentioned that a certain variation in the indices given is due to differences in the compositions of the nutrient media. This is the first time that the capacity of this microorganism for producing odoriferous substances similar in composition to the essential oil of the mycelial fungus *Eremothecium ashbyii* [2] and fresh roses [4] has been detected.

LITERATURE CITED

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