SUBCELLULAR LOCALIZATION OF ISOCITRATE LYASE IN MAIZE SCUTELLUM

E.V. Maslova, D.N. Fedorin, V.Yu. Bashmakov, V.N. Popov, A.T. Epritsev

The maize scutellum call organelles separation were conducted in sucrose density gradient. Glyoxisomal, mitochondrial and cytosolic fraction were obtained. The crosscontamination was detected using marker enzymes: catalase, succinate dehydrogenase and lactate dehydrogenase. Two isoforms of isocitrate lyase previously separated by ionexchange chromatography on DEAE-cellulose were discovered in glyoxisomal fraction. It is proposed that they provide different functions: one is participating in metabolism of acetyl-CoA, product of fatty acids destruction. Another provides different anaplerotic reactions.