MIRZO ULUG‘BEK NOMIDAGI
O‘ZBEKISTON MILLIY UNIVERSITETI
JIZZAX FILIALI



"BIOTEXNOLOGIYANING RIVOJLANISH ISTIQBOLLARI VA MUAMMOLARI"

MAVZUSIDAGI RESPUBLIKA MIQYOSIDAGI ILMIY-TEXNIK ANJUMAN TO‘PLAMI





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МИНИСТЕРСТВО ВЫСШЕГО ОБРАЗОВАНИЯ, НАУКИ И ИННОВАЦИЙ РЕСПУБЛИКИ УЗБЕКИСТАН

ДЖИЗАКСКИЙ ФИЛИАЛ НАЦИОНАЛЬНОГО УНИВЕРСИТЕТА УЗБЕКИСТАНА ИМЕНИ МИРЗО УЛУГБЕКА

СБОРНИК ТЕЗИСОВ РЕСПУБЛИКАНСКОЙ НАУЧНОЙ КОНФЕРЕНЦИИ

«ПЕРСПЕКТИВЫ И ПРОБЛЕМЫ РАЗВИТИЯ БИОТЕХНОЛОГИЙ»

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o‘simlik ko‘chatlarini yetishtirish orqali mamlakatimizdagi sho‘rlangan hududlarda o‘simlik populyatsiyalarini kengaytirish imkoniyati yaratiladi.

Foydalanilgan adabiyotlar ro‘yxati:

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E. FRANCHETII (B.FEDTSCH) O‘SIMLIGIDAN POLIFENOLLAR YIG‘INDISINI AJRATIB OLISH VA UNING TAHLILI

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Annotatsiya: Ushbu tadqiqot “*E. franchetii (B. Fedtsch)* o‘simligidan polifenollar yig‘indisini ajratib olish va uning tahlili” mavzusida bo‘lib, bunda dissertatsiya mavzusining dolzarbliligi, tadqiqotning maqsadi, tadqiqotning usullari va olingan natijalar va ularning tahlili qayd etilgan. O‘zbekistonda o‘suvchi *Euphorbiaceae* oilasiga kiruvchi *Euphorbia franchetii (B.Fedtsch)* o‘simlikning yer ustki va yer ostki qism polifenollari tarkibi o‘rganildi. Olingan natijalar asosida polifenollar asosan o‘simliklarning yer ustki qimslarida ko‘p miqdorda to‘planishi ma’lum bo‘ldi Laborotoriya sharoitida olingan tahlil natijalari yordamida ko’zlangan maqsadga erishildi va ishlab chiqarishga tadbiq qilingan.

Kalit so`zlar: Polifenollar, etilatsetatli fraksiya, flavonoidlar, fenolik kislotalar, atseton, etanolli ekstraksiya, xloroformli ekstraksiya, vakuum-quritish shkafi.

E. franchetii (B.Fedtsch) o‘simligini gullash davrida yig‘ishtirib olingan va quritib, maydalangan yer ustki qismidan 1 kg dan olib, lipofil birikmalardan tozalash maqsadida 45^0S haroratda, 2 soat davomida, 3 marotaba takroriylikda xloroform bilan (1:6 nisbatda, 1 kg: 6 l) ekstraksiya qilindi. So‘ng xom ashyoni quritib, 70% suvli atseton bilan yuqorida keltirilgan sharoitlarda ekstraksiya qilindi va 12 l suvli atsetonli ekstrakt olindi. Ekstraktlardan atsetonni vakuum ostida 35-40^0S haroratda haydab, 4 l suvli qism ajratib olindi. Suvli qismni etilatsetat bilan (1:4 nisbatda) bir necha marta ajratish voronkasida ishlov berilib, 8 l etilatsetatli fraksiya ajratib olindi. Etilatsetatli fraksiyani suvsiz Na_2S0_4 tuzi bilan (24 soat davomida) quritildi. Fraksiyani filtrlab, etilatsetatni vakuum ostida rotorli bug‘latgich qurilmasida haydab, 2 l etilatsetatli konsentrat olindi. Konsentratni (1:4 nisbatda) xloroform bilan cho‘ktirib, filtrlandi va xloroform bilan 3 marotaba yuvildi. Cho‘kmani xona haroratida, vakuum-quritish shkafida quritilib, tekshirilgan o‘simliklardan mos ravishda 58 g polifenollar yig‘indisi ajratib olindi.

Xulosa: *E. franchetii (B.Fedtsch)* o‘simliklardan ajratib olish, polifenollar yig‘indisini ajratib olish, yig‘indisini fraksiyalarga ajratib olish, polifenollarni ekstraksiyalash jarayoni, polifenollarning antioksidantlik faolligini aniqlash, flavanoidlarning antiradikallik xususiyatini aniqlash, polifenollarning temir askorbat yordamida lipidlar peroksidlanish jarayoniga ta`siri, polifenollarning gipoksiklik faolligini aniqlash, polifenollarning zaharliligini aniqlash kabi tadqiqotlar o‘tkazilgan

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DATA MINING ON PHOSPHATASES FROM THE REFERENCE GENOM OF RAHNELLA AQUATILIS BACTERIA

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Due to the annual population growth in our country, it is necessary to obtain high-quality plant production yields and enhance soil fertility to ensure the population is supplied with food and agricultural products. One of the key conditions for increasing agricultural productivity is the level of phosphorus availability to plants. Phosphorus, along with nitrogen, is an essential nutrient for plants. It is involved in almost all major metabolic processes in plants, including nucleic acid synthesis, photosynthesis and respiration, energy metabolism and storage, molecular biosynthesis and signal transduction, as well as nitrogen fixation in legumes.

During the decomposition of phosphorus-containing organic matter, phosphoric acid is formed, which immediately binds with soil bases and turns into insoluble salts of calcium, magnesium, and iron. These salts are converted into soluble phosphoric acid salts through the action of bacteria that produce organic acids [1].

A promising direction for improving phosphorus nutrition in crops is the biological mobilization of phosphates using soil microorganisms, which facilitates the conversion of poorly soluble phosphorus compounds from soil and fertilizers into forms accessible to higher plants [2].

The mineralization of organic phosphorus occurs under the action of various phosphatase enzymes that catalyze the hydrolysis of phosphoric acid esters [3,4].