



SHO'RLANGAN TUPROQLAR SHAROITIDA G'O'ZANING MORFOLOGIK BELGILARI VA RIVOJLANISHIGA BENTONITNING TA'SIRI

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ABSTRACT

Maqolada sho'rlangan tuproqlar sharoitida g'o'zaning morfologik belgilari va rivojlanishiga bentonitning ta'siri batafsil bayon etilgan. Bentonitning kimyoviy tarkibi va paxta yetishtirishda qo'llanishining ijobiy tomonlari haqida ma'lumotlar berilgan. Go'za chigitlarini sho'rlangan tuproq sharoitida bentonid bilan ishlov berish hosildorlik va sifat ko'rsatkichlarini oshiradi.

Respublikamiz sharoitida g'o'zadan barqaror, yuqori va sifatli hosil yetishtirish iqtisodimizning tayanchi bo'lib, valyuta tushumining asosiy qismini paxta tolasi eksporti ta'minlaydi. Shuningdek, qishloq xo'jaligi va sanoatning ko'pgina tarmoqlari rivoji paxtachilik sohasi bilan bevosita bog'liqdir. Shu nuqtai nazardan paxta xomashyosini ishlab chiqarishni ko'paytirish, bunda sarf xarajatlarni 30%ga kamaytirish, hosildorlikni 20% ga oshirish, tabiiy iqlim sharoit noqulayliklariga qaramasdan, yuqori hosil yetishtirishning agrotexnik tadbirlarini zamonaviy sharoitlarga moslab ishlab chiqish va modernizatsiya qilish muhim masala hisoblanadi. Noan'naviy ma'dan xom ashyolar safiga bentonitlar, glaukonitlar, paligorskitlar, seolitlar, vermikulitlar, karbonat-fosfatli jinslar, ma'dan loyqalari, tog' kon sa'naot chiqindilari va boshqalar mikroelementlar manbai bo'lib xizmat qiladi hamda tuproqning suv-fizik xususiyatlarini yaxshilaydi.

Ma'lumki, fiziologik faol moddalar g'o'za metabolizmida fotosintez jarayoniga, fermentlar faolligiga, aminokislotalar, nukleinkislotalar va oqsil biosinteziga, fitogormonlar almashinuvi jarayoniga o'ziga xos ta'sir etib, urug'larning unib chiqish quvvati va unuvchanligini oshiradi, qurg'oqchilik, sho'rga va kasalliklarga bardoshliligi ortadi, o'simlikning jadal o'sishiga ijobiy ta'sir ko'rsatib, hosilning pishishini tezlashtiradi, mahsuldorligi va mahsulot sifati ortadi.

Tadqiqotning ob'ekti. Respublikaning o'tloqlashib borayotgan taqirsimon tuproqlari, Navbahor va Hovdak konlaridagi bentonit loyqasi, kapsulalangan chigit, mahalliy va ma'dan o'g'itlar va g'o'za navlari.

Tadqiqotning predmeti. Noan'naviy agrorudalar bentonit loyqasi bilan kapsulalangan chigitning g'o'zaning o'sishi rivojlanishi va hosildorligiga ta'sirini o'rganish va uni iqtisodiy jihatdan baholash ilmiy tadqiqot ishining predmeti hisoblanadi.

Tadqiqotning asosiy maqsadi. Turli g'oz'a navlarida bentonit loyqasi bilan kapsulalangan chigitni ekishning g'ozaning o'sish-rivojlanishi va hosildorligiga ta'sirini o'rganishdan iborat.

Tadqiqot uslublari: Tadqiqotlarni uslubiy jihatdan o'tkazishda "Dala tajribalarini o'tkazish uslublari" (2007), tuproq tarkibidagi oziqa moddalar miqdorlarini aniqlash va agrofizikaviy tahlillar qo'llanmasidan foydalanilgan.

Mamlakatimiz va xorijda ko'plab olimlar tomonidan noan'anaviy agrorudalarning qishloq xo'jaligida qo'llanilishi borasida ilmiy tadqiqot ishlari amalga oshirilgan. Jumladan agrorudalarning o'simliklarda kechadigan fiziologik, biokimyoviy jarayonlarga keng ta'sir etishi aniqlangan;

agrorudalar bentonit va gloukonitning tuproq mexanik tarkibini yaxshilovchi, o'simliklarning fiziologik jarayonida katalizator sifatida, fotosintezda, modda almashinuvida, kasalliklarga bardoshlilikida muhim ahamiyatga ega ekanligi aniqlangan;

bentonit loyqasi turli me'yor va muddatlarda tuproqqa qo'shimcha ozuqa sifatida berilganda, tuproqning suv-fizik xususiyatlari yaxshilanib, mavsumiy suv sarfi tejalishi, g'ozaning vilt va ildiz chirish kasalligi 25-40% kamayishi hamda paxta hosilining 14,2-20,6% oshirish imkonini berganligi aniqlangan;

Buxoro viloyatining o'tloqi-bo'z tuproqlari sharoitida har xil g'oz'a navlari chigitlarini bentonit loyqasi eritmasi bilan kapsulalab ekishning g'oz'a unib chiqishi dinamikasi va rivojlanish fazalari jadalligiga hamda hosildorlikga ta'siri aniqlangan.

Tadqiqotning ilmiy va amaliy ahamiyati: Noan'anaviy agroruda bentonit loyqasi bilan kapsulalangan chigitlarni ekish g'oz'a ko'chatlarining unib chiqishini 1-2 kunga jadallashtirib, salmog'ini 10-12% ko'paytirishi va hosildorlikning 2,2- 5 s/ga yuqori bo'lishi isbotlangan.

Xulosa o'rnida aytish mumkinki, bentonit gillarining yuqorida keltirilgan xususiyatlari tajribalardagi paxta hosilida ham o'z ijobiy natijalarini bergan. Mavsum davomida 4 marta emas, 3 marta sug'orish bilan, ya'ni, 700-1000 m³ gacha sug'orish suvlarini tejagan holda ham bentonit gillaridan foydalangan holda yuqori hosildorlikka erishish mumkinligi ilmiy asoslangan.

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