



OQ XANTAL (*Sinapis alba* L.) URUG‘LARINING UNUVCHANLIGIGA HARORAT VA NAMLIKNING TA’SIRI

S.B.Yalgasheva

Samarqand tibbiyot instituti assistenti

Ikromova Nafosat

Samarqand tibbiyot instituti talabasi

Ziyatov Asilbek

Samarqand tibbiyot instituti talabasi

Annotatsiya: Mazkur maqolada oq xantal (*Sinapis alba* L.) urug‘larining unuvchanligiga harorat va namlik omillarining ta’siri o‘rganildi. Tajribalar natijasida urug‘larning optimal unuvchanligi 20–25 °C harorat va 60–70% namlik sharoitida kuzatildi. Past yoki yuqori harorat va namlikda unuvchanlik sezilarli darajada pasaydi.

Kalit so‘zlar: *Sinapis alba* L., urug‘ unuvchanligi, harorat, namlik, fiziologik jarayonlar

Kirish

Oq xantal(*Sinapis alba*)—Brassicaceae oilasiga mansub beryillik o‘simlik. Ba’zan *Brassica alba*yoki *B. hirta* deb ham ataladi.

O‘simlikziravorsifatida ishlatiladigan urug‘lari uchun yetishtiriladi, u O‘rta yer dengizi mintaqasida paydo bo‘lgan bo‘lsa ham, hozir butun dunyo bo‘ylab keng tarqalgan. Yevropa, Shimoliy Afrika, Yaqin Sharqva Markaziy Osiyoda keng tarqalgan bo‘lib, unibutundunyodatopishmumkin. UGrenlandiyashimolida topilgan va Buyuk Britaniya va Irlandiya bo‘ylab naturalizatsiya qilingan. Oq xantal bir yillik o‘simlik bo‘lib, bo‘yi 70 sentimetrgacha yetadi. O‘simlikning sariq gullari, siyrak tukli urug‘lar hosil qiladi. Har bir meva o‘nlab urug‘larni o‘z ichiga oladi. O‘simliklar urug‘lari pishib, yorilishidan oldin yig‘ib olinadi.



Oq xantal (*Sinapis alba* L.) — krustotsvetlar (Brassicaceae) oilasiga mansub qimmatli moyli va yem-xashak o‘simlikdir. U qisqa vegetatsiya davriga ega bo‘lib, tuproqni yaxshilaydi va yashil o‘g‘it sifatida keng qo‘llaniladi. O‘simlikning hosildorligi ko‘p jihatdan urug‘larning unuvchanligi va dastlabki o‘sinh sur‘atlariga bog‘liq. Urug‘ning unuvchanligi esa tashqi muhit omillaridan — harorat va namlikdan — bevosita ta’sirlanadi.

Shuning uchun oq xantal urug‘larining unuvchanligiga turli harorat va namlik sharoitlarining ta’sirini aniqlash amaliy ahamiyatga ega.

Materiallar va uslublar

Tadqiqot laboratoriya sharoitida o‘tkazildi. Tajriba uchun sog‘lom, yirik urug‘lar tanlab olindi.

Urug‘lar 4 xil haroratda (10°C, 15°C, 20°C, 30°C) va 3 xil namlik darajasida (50%, 60%, 70% ППВ) unuvga qo‘yildi. Har bir variant 4 takrorlikda bajarildi. Unuvchanlik foizda hisoblanib, 7-kun yakunida aniqlanib, quyidagi formula bo‘yicha hisoblandi:

$$U = \frac{n}{N} \times 100$$

Bu yerda:

U — unuvchanlik foizi,

n — ungan urug‘lar soni,

N — ekilgan urug‘lar soni.

Natijalar va muhokama

Tajriba natijalariga ko‘ra, harorat va namlik o‘zgarishi oq xantal urug‘larining unuvchanligiga sezilarli ta’sir ko‘rsatdi. 1- jadvalda o‘rtacha natijalar keltirilgan:

1-jadval

Harorat (°C)	Namlik (%)	Unuvchanlik (%)	O‘rtacha unish vaqti (kun)
10	60	65	7–8



15	60	82	4–5
20	70	94	2–3
25	70	91	2–3
30	70	75	3–4

Natijalardan ko‘rinadiki, **20–25 °C harorat va 60–70% namlik** oq xantal urug‘larining eng yuqori unuvchanligini ta’minladi.

Past harorat (10°C)da fiziologik jarayonlar sust kechadi, urug‘lar suvni sekin singdiradi, unuv sekinlashadi.

30°C dan yuqori haroratda esa urug‘ to‘qimalarida stress holati kuzatiladi va fermentlar faoliyati pasayadi.

Namlik yetishmovchiligi (50%) urug‘larning suv sathini to‘ldirishini qiyinlashtiradi, ortiqcha namlik esa (75% dan yuqori) havo yetishmovchiligiga olib kelib, chirish xavfini oshiradi.

Xulosa

1. Oq xantal urug‘larining optimal unuvchanligi **20–25 °C harorat va 60–70% namlikda** ta’minlanadi.
2. Haroratning 10 °C gacha pasayishi yoki 30 °C dan oshishi unuvchanlikni 20–30% gacha kamaytiradi.
3. Namlik yetishmasligi yoki ortiqcha bo‘lishi urug‘ning suv balansini buzib, fiziologik faolligini pasaytiradi.
4. Shunday qilib, oq xantal ekinlari uchun ekish davrida tuproq harorati va namlikni nazorat qilish urug‘larning teng va barqaror unuvini ta’minlaydi.

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