



THE GROWTH PERIOD OF LENTIL VARIETIES AND RANGES IN RAINFIELD AREAS

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Article history:	Abstract:
Received: 20 th April 2024 Accepted: 11 th May 2024	This article presents information about the length of the growing season of 30 varieties and rows of lentils (<i>Lens culinaris</i>) studied in a controlled variety trial nursery under the conditions of dry areas, compared with the model variety.
Keywords: rainy field area, lentil, heat-resistant, nursery of controlled variety trials, variety, ridge, reversible, flowering, formation of pods	

INTRODUCTION: Legumes, including peas and lentils, are the main source of dietary protein for approximately 30% of the world's population [1].

Canada in 2021 lentils work release on 1,606,441 tons the highest with place , from him after India and Australia took over According to FAO according to 2021 in the world total lentils work output to 5,610,104 tons enough

In 2021, the area under lentil cultivation in Canada was approximately 1.7 million hectares. India has harvested more than 1.7 million hectares of lentils in 2021 .

Legumes are one of the food sources with the best nutritional properties, and their consumption is associated with a number of beneficial properties for human health [2].

Lentils sometimes " poor man's. " " meat " . is called Such definition ancient in Europe appear was

Without rapid increases in productivity, the gap in legume production is estimated to increase to 10 million tons by 2050 [3].

According to the obtained data, it was emphasized that when hybridization of parental and maternal genotypes of lentil resistant to a number of stress factors is carried out, productive and resistant varieties of lentil are created [4].

In addition, changes in temperature during the reproductive stage of legume development due to climate change primarily affect their yield and nutritional value. During flowering and fruiting, temperatures above 32°C damage reproductive organs, leading to significant losses in lentil grain yield [5].

30 varieties and rows of lentil were planted with the help of manual labor in 3 rotations in order to select the varieties and rows that are resistant to climate factors, fertile and with high protein content in the experimental field of Kamashi district of Southern Agricultural Research Institute.

According to the results of the conducted research, when the lentil crop was planted on February 16, when the air temperature was on average 5-6 ° C, it was observed that 90-98% germinated on March 4-6. When the branching phase of lentil varieties and ridges was analyzed according to returns, it was determined on average on March 28-30, and it was observed that branching was late due to low air temperature. In this case, model varieties, i.e. "Darmon", "Sarbon" and "Golden Don" varieties germinated on March 4, it was observed that 21 ridges germinated on the same day as the model varieties, and the remaining 6 ridges germinated on March 5-6. it was found out **(Table 1.1)** .

that the model varieties "Darmon" and "Altin don" varieties branched on March 28, and the "Sarbon" variety branched on March 29. As a result of phenological observations, it was determined that 7 ridges were formed in one day with the model varieties "Darmon" and "Altin Don", 18 ridges were formed in one day with the model variety "Sarbon" , and the remaining 2 ridges branched at the end.

" Darmon " and " Altin " of lentils don " template varieties budding period analysis when done returns according to on average , April 14 , " Sarbon " template of the variety budding period was observed on April 15 . " Darmon " and template " Gold grain " variety with one 12 per day ridge , " Sarbon " template variety with one 11 a day ridge and the remaining 4 ridge early in the period on April 13 budding phase the past observed .

Table 1.1

' water of lentil varieties and ridges in the control nursery indicators of the period (Qamashi-2022).

No	Name	Unib exit , sa na	Unib came out plants number , pcs	Branching , date	Budding , date	Flowering date	Bean harvest to be , date	Ripe , date	Until ripe strangled day
1	Medicine (formula)	March 4	38	March 28	Apr 14	April 22	May 11	May 20	77
2	Sarbon (template)	March 4	37	March 29	April 15	Apr 23	May 12	May 20	77
3	Gold grain (template)	March 4	37	March 28	Apr 14	April 21	May 11	May 19	76
4	KR20-LIEN-E-05	March 4	37	March 29	April 15	April 22	May 10	May 19	76
5	KR20-LIEN-E-06	March 4	37	March 28	April 15	April 22	May 11	May 21	78
6	KR20-LIEN-E-07	March 4	37	March 30	April 15	April 22	May 11	May 20	77
7	KR20-LIEN-E-09	Mar 5	36	March 29	Apr 14	April 21	May 12	May 21	77
8	KR20-LIEN-E-10	March 4	37	March 29	April 15	April 22	May 12	May 20	77
9	KR20-LIEN-E-12	March 4	37	March 29	Apr 14	April 21	May 12	May 20	77
10	KR20-LIEN-E-13	March 4	38	March 29	April 15	April 21	May 12	May 20	78
11	KR20-LIEN-E-14	Mar 5	37	March 28	April 15	April 22	May 12	May 21	77
12	KR20-LIEN-E-15	Mar 5	37	March 30	April 15	Apr 23	May 11	May 19	76
13	KR20-LIEN-E-16	March 4	36	March 29	Apr 14	April 20	May 13	May 21	78
14	KR20-LIEN-E-17	March 4	36	March 28	Apr 13	April 20	May 12	May 21	78
15	KR20-LIEN-E-18	March 4	37	March 29	Apr 14	April 20	May 11	May 21	77
16	KR20-LIEN-E-21	March 4	36	March 29	Apr 14	April 21	May 11	May 20	77
17	KR20-LIEN-L-01	March 4	38	March 29	Apr 14	April 21	May 12	May 21	78
18	KR20-LIEN-L-04	March 4	38	March 29	April 15	April 22	May 12	May 21	78
19	KR20-LIEN-L-06	Mar 5	37	March 29	Apr 14	April 21	May 11	May 20	76
20	KR20-LIEN-L-07	March 4	37	March 28	Apr 13	April 20	May 10	May 20	76
21	KR20-LIEN-L-08	March 4	37	March 29	April 15	Apr 23	May 11	May 20	77
22	KR20-LIEN-L-09	March 4	37	March 29	Apr 14	April 21	May 13	May 21	77
23	KR20-LIEN-L-15	March 4	37	March 29	Apr 14	April 21	May 12	May 20	77
24	KR20-LIEN-L-16	March 4	37	March 28	Apr 14	April 21	May 11	May 21	78
25	KR20-LIEN-L-18	Mar 6	37	March 29	Apr 14	April 21	May 11	May 20	75
26	KR20-LIEN-L-19	March 4	37	March 28	Apr 13	April 20	May 12	May 20	77
27	KR20-LIEN-L-21	March 4	37	March 29	Apr 14	April 21	May 11	May 20	77
28	KR20-LIEN-L-23	Mar 5	37	March 29	April 15	April 22	May 12	May 20	77
29	KR20-LIEN-L-24	March 4	37	March 28	Apr 13	April 20	May 12	May 21	78
30	KR20-LIEN-L-25	March 4	37	March 29	Apr 14	April 20	May 12	May 21	78
	Minimum indicator	March 4	36	March 28	Apr 13	April 20	May 10	May 19	75
	Average indicator	March 4	37	March 29	Apr 14	April 21	May 11	May 20	77
	Maximum indicator	Mar 6	38	March 30	April 15	Apr 23	May 13	May 21	78

Flowering period lentil " Darmon " variety on April 22, " Sarbon " variety on April 23, " Altin don" variety on April 21 and 7 in the ridges and earlier on April 20 observed .

Lentils variety and of ridges podding to the period transition , " Darmon " and " Golden grain" template varieties with one 10 per day ridges on May 11, " Sarbon " model varieties with one 13 per day ridges on May 12 and the remaining 4 from the ridge two of them the morning of May 10, two while later on May 13th observed .

Transferred research to the results according to lentil variety and of ridges to ripen phase for May 19-21 right came Model " Golden grain" variety and 3 of the ridges on May 19, " Darmon " and " Sarbon " model varieties and 13 ridges on May 20 and the remaining 11 variety and ridges while later on May 21 in full cooked maturity observed .

of lentils model in " Darmon " and " Sarbon " varieties until ripe has been period is 77 days , 76 days in " Golden grain" variety organize that he did observed . " Darmon " and " Sarbon " template varieties with one 13 per day variety and ridges , " Golden grain" template variety with one 4 per day variety and ridges and the remaining 11 1 of the ridges tomorrow 75 days , 10 of them while 78 days later organize that he did studies as a result was determined .

SUMMARY in place emphasizing transition It should be dry fields conditions take went studies as a result according to lentil variety and of ridges growth period during 1510 ° C organize that he did Qamashi district agrometeorological station from the data was determined . At an air temperature of 1510 ° C template varieties relatively to the heat resistant and morning has been KR20-LIEN-L-18 ridge choose received and to the keying stage of selection was conducted .

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