Ref. Ares(2020)6037567 - 28/10/2020

THE SPECIFICATION

1.1. Name

'TAŞKÖPRÜ SARIMSAĞI'

1.2. Description of the agricultural product or foodstuff

”Taşköprü Sarımsağı” is classified as Allium sativum. var. sativum also known softneck garlic. It is a late bloomer garlic with a long cultivation period.

Head:

- Cross section of the head is oval,
- Longitudinal section is Elliptic shape
- White shell
- Diameter between 30 to 40 mm
- Weight: between 15 and 60 grams

Cloves:

- Tight cloves at the head
- Not all identical (different forms) and are ordered randomly within the head
- Distorted form-and have a tendency to generate outer cloves
- Weight between 2 to 3 grams.
- Pink shell
- Creamy-yellow color inside the cloves.
- Dry matter content between 31.2 and 44.1 %
- The average number of cloves is 12 cloves

The distinguishing features of "Taşköprü Sarımsağı" are the following:

- Separation of the shell from the head is difficult.

- The minimum selenium content is 3,535 $mgkg^{-1}$ on dry matter

- There is a little anthocyan in the head shell, there are lines of anthocyan on the cloves, average number of cloves (12 cloves),

- There are 5 to 10 protective layers on the head.

- Volatile organic sulfur compound (dry) % 0.089 -0.214

- It can be stored up to 10 months

- Bitter taste

- Strong and persistent smell

- The minimum Allyl Propyl (C6H12S2) disulfide content is 0,0147 mgkg-1 on dry matter.

As known the odor is a special sensation created by the particles that are emitted from the objects and mixed with the air in the nerves on the nose and sensed through the nose. The odor of the "Taşköprü Sarımsağı" has strong, tang and persistent smell. Thanks to its odor, the "Taşköprü Sarımsağı" helps to open the breathing passage. It has a characteristic bitterness and odor. It is bitterer compared to other garlic species. The amount of selenium determines the bitterness of a garlic.

Selenium amount is the highest for the soil sample in Taşköprü district compared to other regions. This implies that the bitterness rate of "Taşköprü Sarımsağı" is higher than the others.

Table.1 the highest concentrations, the lowest concentrations and the average concentrations of selenium amount for the soil samples from several city in Turkey

Se (mgkg-1)			
Provinces	Lowest	Highest	Average
Taşköprü	11,09	27,83	22,34
Balıkesir	12,87	21,58	17,10
Karaman	4,14	14,53	12,33
Kırklareli	3,90	12,67	9,32
Antalya	5,93	10,46	8,44
Kahramanmaraş	2,68	6,94	5,66
Muğla	1,54	5,04	4,16

In reference to Table 1, the average concentrations of selenium amount for the soil samples received from several city in Turkey are 17.10 mg kg-1 in Balıkesir, 9.32 mg kg-1 in Kırklareli, 5.66 mg kg-1 in Kahramanmaraş, 1.76 mg kg-1 in Hatay, 8.44 mg kg-1 in Antalya, 12.33 mg kg-1 in Karaman, 4.16 mg kg-1 in Mugla, and 22.34 mg kg-1 in Taşköprü. At this stage, according to selenium amount for the soil samples from several city in Turkey , the average concentration of the selenium amount

for the soil sample from Taşköprü district is the higher than the other soil samples from several city in Turkey.

As the garlic has the highest selenium content on average in the soil samples the content in the dry matter form is also very high.

Table 2. Selenium (Se) Concentration of the "Taşköprü Sarımsağı"

	Se, mg kg^{-1} dry matter	Se, mg kg^{-1} raw weight
Lowest	3.535	0.884
Highest	9.330	2.333
Average	6.488	1.622

Allyl Propyl disulfide (C6H12S2) which provides the smell of the "Taşköprü Sarımsağı" exists in high content. The minimum average Allyl Propyl disulfide content 0,0147 mgkg-1 on dry matter. Its component is very rich in mineral substance and vitamins. Due to the high level of dry matter content it can be stored for a long time easily. It can be stored for 8 to 10 months in the average storage conditions.

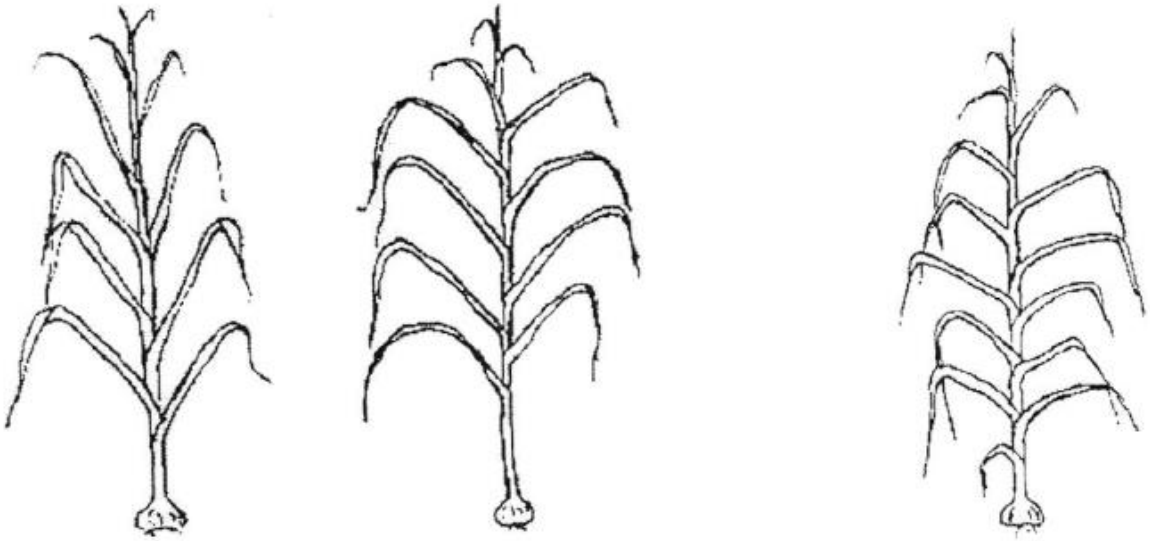
"TAŞKÖPRÜ SARIMSAĞI" GARLIC UPOV GARLIC FEATURES CERTIFICATE
BOTANICAL CLASSIFICATION;
Family : Alliaccac
Genus : Allium
Species : Allium sativum L.
Veriety : Allium sativum var. Sativum

MORPHOLOGICAL FEATURES

Features	Explanations
1. Intensity of the green parts	Medium
2. Position of the green parts (leaves)	Upright
3. Colour of the leaves	Bright green
4. Wax degree of the leaves	Medium
5. Length of the leaves (longest leaf)	Medium
6. Width of the leaves (longest leaf)	Medium
7. Shape of the in cross section	Very concave
8. Anthoeyan presence in pseudo-body bottom	Medium
9. Width of the pseudo-body bottom	Medium
10. Peduncle formation presence in pseudo-body (it is formed due to the conditions of storage, season annd physiology)	Available
11. Length of the peduncle	Medium
12. Clove formation in the crown board	Available
13. Corpulence of the head	Medium

14. Shape of the longitudinal section of the bead	Wide elliptic
15. Shape of the cross section of the head	Elliptic (oval)
16. Array of the cloves at the top of the head	Same level as the rock
17. Position of the head root disc	Straight
18. Shape of the root part of the head	Straight
19. Tightness of the cloves in the head	Tight
20. Ground colour of the head crust	White
21. Presence of the anthocyan lines at the head (few)	Available
22. Severability of crust from the head	Difficult
23. Thickness of the head crust	Medium
24. Clove number in the head	Medium
25. Array of the cloves at the head	Dispersed (not radiational)
26. Formation of outer cloves around the head	Available
27. Corpulence of the cloves	Medium
28. Clove crust colour	Pink
29. Intensity of clove crust colour	Medium
30. Presence of the anthocyan lines on the clove crust	Available
31. Colour of the edible portion of the clove	Cream-Yellowish
32. Harvest Ripeness period	Late

‘’ Green Part Position ‘’ of “Taşköprü Sarımsağı” has a formation as figure 1



1 upright

2 upright-semi upright

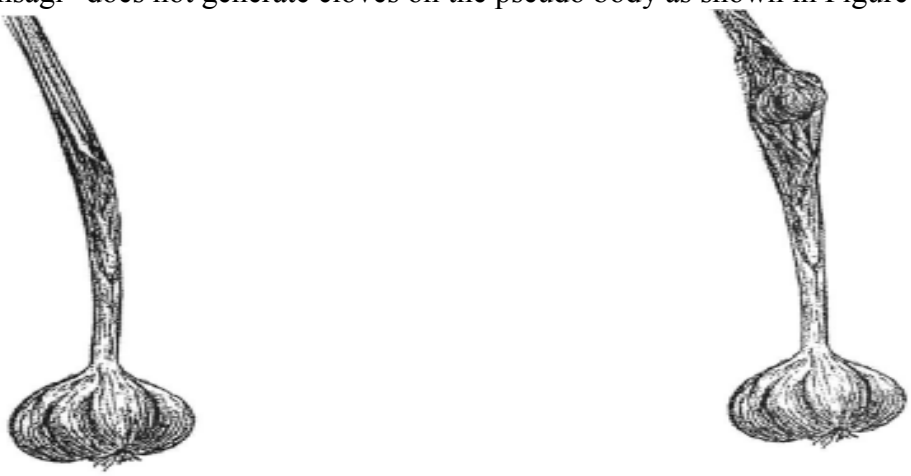
3 semi upright

“Taşköprü Sarımsağı” starts bolting in accordance with the climatic conditions and agricultural activities. Peduncle displays contortion as shown in Figure 2. “Taşköprü Sarımsağı” does not have seeds in the peduncle. Unlike which only has flower drafts in the crown board, “Taşköprü Sarımsağı“ has little sty cloves.



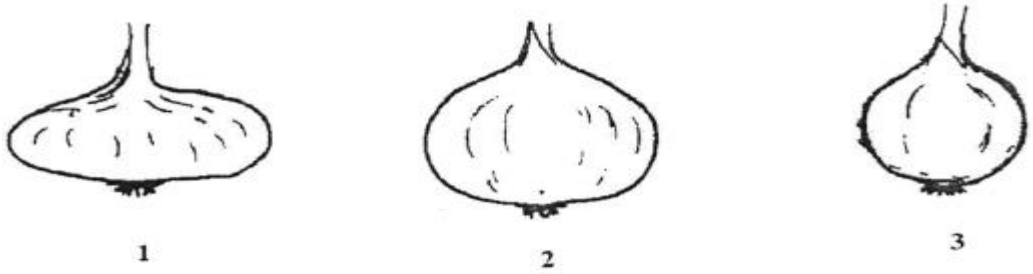
1 2

"Taşköprü Sarımsağı" does not generate cloves on the pseudo body as shown in Figure 2.

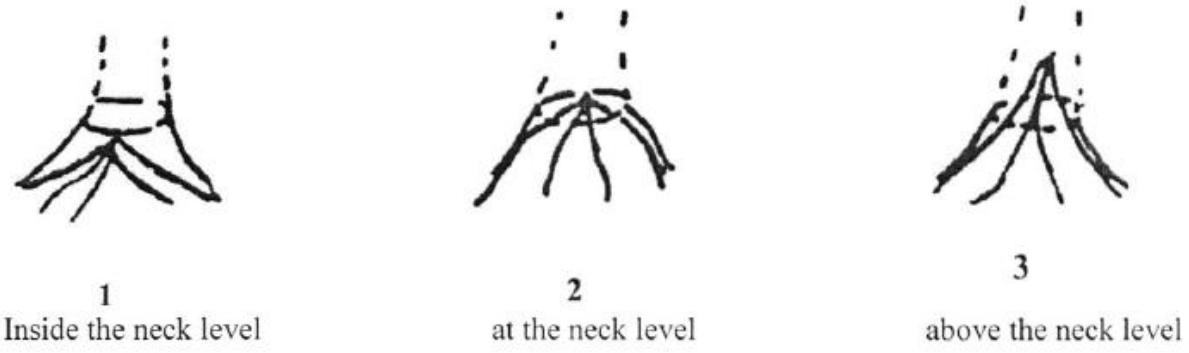


1 2

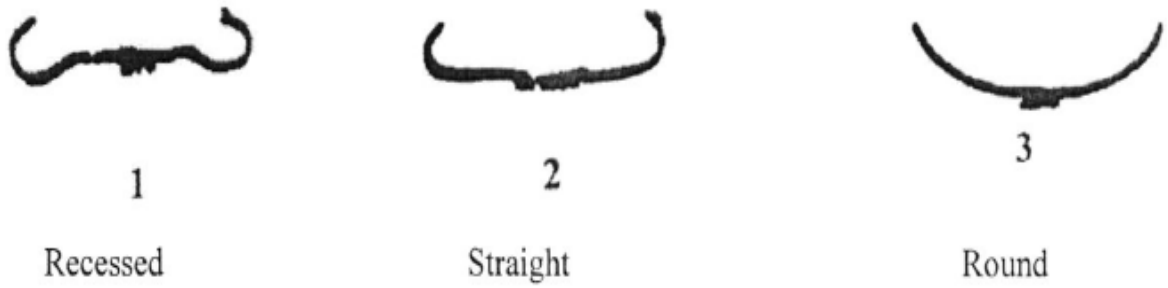
Head length of the "Taşköprü Sarımsağı" is not low like as shown in Figure 1. Its height has the shape of an ellipse as shown in Figure 2. It is not round shaped either like in Figure 3.



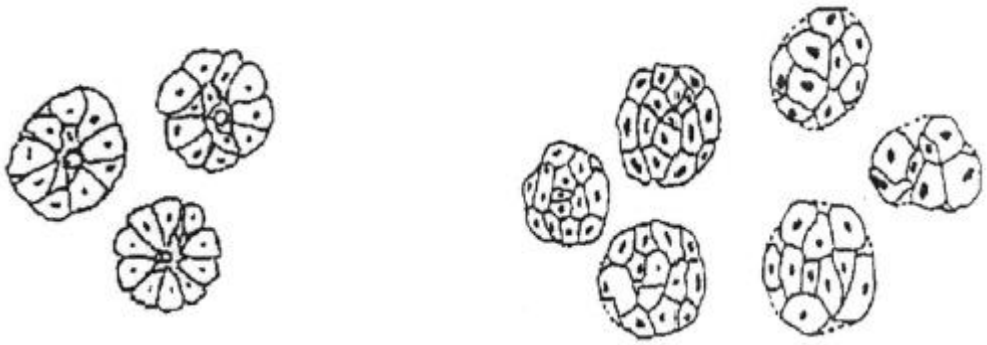
‘’ View of the cloves from the neck ‘’ of “Taşköprü Sarımsağı” is arranged at the level of the neck as shown in Figure 2. The cloves are neither inside the neck level as Figure 1 nor extrude to the stem as shown in Figure 3.



‘’ Shape of the root disc ‘’ at the root part of the head of “Taşköprü Sarımsağı” displays a straight formation as shown in Figure 2.



When the head of “Taşköprü Sarımsağı” is cut crosswise ‘’ Array of the Cloves at the head ‘’ displays a disorderly form as shown in Figure 2. This form also exists in Local garlic whereas it displays ‘’ ordered ‘’



1 2

Orderly arranged Not orderly arranged

Whereas "Taşköprü Sarımsağı" is tend to generate outer cloves as shown in Figure 2, species do not generate outer cloves.



1 2

Chemical Components:

Limits of Change	**Minimum**	**Maximum**	**Average**
Soluble Dry Matter (%)	31.2	44.1	36.9
Refractive Index (20-20 c)	1.3833	1.4068	1.3942
Titratable Acidity (%,SSA)	0.356	0.708	0.520
PH Value	5.47	6.90	6.30
Essential Oil (%)	0.147	0.370	0.251
Total Ash (%)	1.209	1.828	1.510
Ash Alkalinity (mval/kg)	63.55	92.51	72.11
Alkaline count	5	8	6.37
Volatile organic sulphur compounds(%)dry	0.089	0.214	0.136
Volatile organic sulphur compounds(%)raw	0.213	0.217	0.215
Total Sugar (%)	35.17	49.67	40.10
Invert Sugar (%)	2.84	10.47	7.941
Saccharose (%)	27.68	39.67	32.69
Ascorbic Asit (mg/100)	9.86	24.18	17.82
Thiamin (B1 vitamin mg/100)	0.105	0.220	0.161
Riboflavin (B2 vitamin mg/100)	0.075	0.127	0.106

Table 2. Selenium (Se) Concentration of the "Taşköprü Sarımsağı"

	Se, mg kg^{-1} dry matter	Se, mg kg^{-1} raw weight
Lowest	3.535	0.884
Highest	9.330	2.333
Average	6.488	1.622

Table 3. Phosphor (P), Potasium (K), Sodium (Na), Calcium (Ca), Magnesium (mg) , Sulphur (S), Zink (Zn), Iron (Fe) and Manganese (Mn) Concentrations of "Taşköprü Sarımsağı"

	P, g kg^{-1}	K, g kg^{-1}	Na, mg kg^{-1}	Ca, mg kg^{-1}	Mg, mg kg^{-1}	S, g kg^{-1}	Zn, mg kg^{-1}	Fe, mg kg^{-1}	Mn, mg kg^{-1}
Lowest	2.66	7.80	9.58	0.32	1.52	10.24	12.44	63.42	4.53
Highest	3.93	12.41	111.47	0.59	176.47	18.94	43.79	157.81	7.78
Average	3.39	10.08	36.76	0.42	65.40	15.08	26.05	89.92	5.96

From planting to harvest, the garlic plant needs more water. Falling rainfall in February and March is sufficient for germination of the plant. After hoeing, depending on the climate in April, sometimes 2-3 times, sometimes 4-5 times, water needs are generally met by sprinkling. No irrigation is made after the 20th of June. After this period, the market value is increased by allowing the field to dry. The ripening is understood by the fact that the leaves of the garlic plant begin to turn yellow. In this period, for better development of the heads and teeth, the above-ground parts are laid in the soil with the help of empty barrel or canister in a way that does not harm the garlic heads and teeth. Approximately after 2 weeks, after the dry part of the soil is thoroughly dried, garlic heads are carefully removed without damaging. If the garlic is to be stored, the leaves are not expected to dry completely after harvest.

Garlic bunches are allowed to dry in the field, depending on the temperature from 8 to 12 days. In order to accelerate the drying, the faces of the garments facing the soil are turned upside down with a few days apart and the other faces are dried. Anatolian Cultural Studies Journal, 2018, Vol: 2, (3) Gözde GENÇ 67 Field drying is very important for garlic. Garlic removed from the field before drying well darkening, decay and quality decreases occur and these garlic does not last long in terms of storage (İbret, 2005: 33). After the first drying is completed, the garlics are collected from the field and taken to a cool and dry place where they are hung with poles. Garlic should be away from moisture in order to avoid disease at this stage.

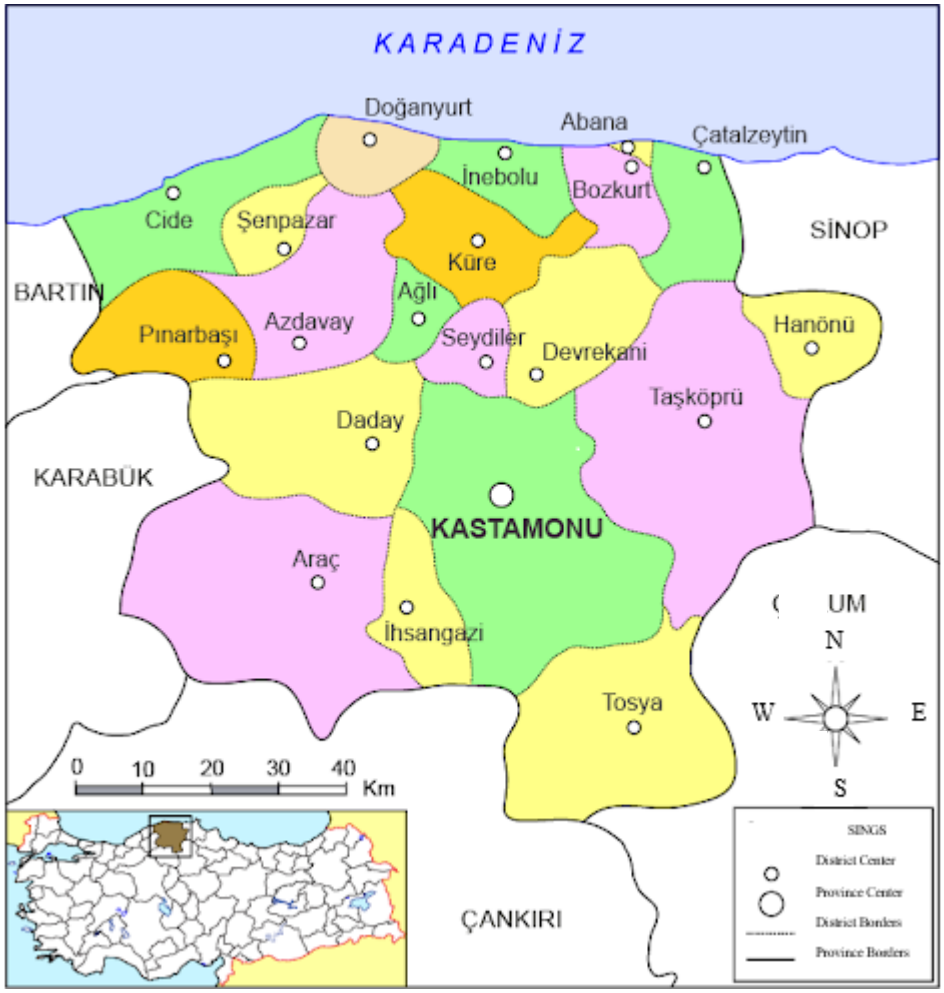
1.3 Definition of the geographical area

The geographical area is the Taşköprü administrative district.

The geographical area covers 1,811.31 km^2.All processes from the planting to the harvesting of "Taşköprü Sarımsağı" must be carried out in Taşköprü district.

The plain where Taşköprü district lies, is extending along Gök river which is of great importance as the alluvial soils of the plain are well suited to garlic cultivation.

Map of Kastamonu province shows the borders and centers of the districts
Including that of TAŞKÖPRÜ



1.4. Proof of origin

The origin and compliance of the "Taşköprü Sarımsağı" with the specification is ensured by experts (at internal and external level by the expert engineers and local producers , Provincial Directorate of Agriculture of KASTAMONU city , Agricultural District Directorate of Kastamonu, Atatürk Horticultural Central Research Institute of Yalova, Taşköprü Chamber of Commerce it is done) who check the product method of production and the quantities at the various production stages (planting, harvesting and drying, weeding and storing and packaging of the garlic).

This ensures the traceability of the garlic.

The control mechanism for verification of compliance with the product specification is internal and external.

The internal control is implemented by the local producers.

Operators (farmers and local producers) must be controlled twice a year and every time in case of complaint.

1.5. Description of the method of obtaining the agricultural product or foodstuff

All processes from the planting to the harvesting and drying of "Taşköprü Sarımsağı" must be carried out in the geographical area which is Taşköprü district, specified in point 1.3.

Planting of "Taşköprü Sarımsağı" is performed by means of strewing by the end of February and in March. Deep tillage is carried out once or twice in the land in which the plantation to be performed and surface tillage is carried out for once in Autumn. During this period, 7-7.5kg of fertilizers with phosphor and potassium are applied to the upper surface of the soil. Cultivator, disc harrow or rake is performed on the soil for the arrangement before the planting. Strewed cloves are buried with hands by distances of 10-12cm from each other. Bottom root part of the cloves must be placed downwards; sprout part of the cloves must be placed upwards during planting. Later, Nitrogenous manure is applied by dividing 2 or 3 times as purely 15-16 kg.

The head seeds to be used for the production are chosen among the grown garlics by the grower in autumn and preserved in storages and suspenders until the time of planting. Heads are divided into cloves with hands or machines before the planting, except for the little cloves in the middle of the garlic, bigger cloves around the head are used for planting.150 kg garlic heads is used. In order to improve rendement and quality of the planting, disinfestations, weeding, watering, leave breaking other maintenance and cultural procedures are also carried out.

"Taşköprü Sarımsağı" is harvested via locally developed garlic harvesting machine during July. "Taşköprü Sarımsağı is left on the ground to dry from 8 to 12 days after the harvest.

Dried harvest are then carried to the farm and sorted and classified and finally put up for sale in local markets. Yield ranges between 700 to 1200 kg in the region.

Before planting, the fields are well processed and made ready for planting to ensure easy planting, irrigation and harvesting and high yields. The fields allocated for garlic cultivation in the region are plowed 20-30 cm. depth. "Taşköprü Sarımsağı" is planted in the spring to be planted by rakes, disc harrows or cuttings are made ready for planting. The preparation of seed beds are usually made by men. This phase is completed in 1-3 days depending on the size of the land in November and December.

The seeds of "Taşköprü Sarımsağı" are the cloves of garlic. The heads of the good "Taşköprü Sarımsağı" harvested one year ago are separated from their stems, "Taşköprü Sarımsağı" cloves are extracted from one grain and these cloves become seed. This process is called indentation. Garlic calibrating machines have been used for this process in recent years.

“Taşköprü Sarımsağı” planted one by one grow the hand planting faster than machine planting. The reason for this is that the machine does not throw the seeds upright and the growth time is prolonged due to the fall of the seeds obliquely. “Taşköprü Sarımsağı”, which grows in 8 - 10 days when planted by hand, comes out 15-20 days later as it falls sideways to the soil in machine production. Ultimately, machine planting is not as efficient as hand planting due to the sparse and oblique sewing of the machine. Therefore, most of the garlic growers in the research area do not prefer the machine. In addition to family work, casual work is also used during hand planting.

An important situation in garlic planting in the region is the application of the cooperative processing method for planting the cloves sprinkled in the field and generally the women perform the planting process. After the 10th of February (depending on the climate in March and April), approximately 120-150 kg of garlic cloves are planted in the area.

The aim of hoeing is to provide weed control and to break the cream layer formed in the soil after irrigation or rain. 2-5 hoes are made for garlic in the region. The first hoe is conducted after plant germinate and 5-10 cm. height receiving. Subsequent hoes are carried out with 2-3 weeks intervals depending on rainfall and weed condition. The hoeing and aeration process are carried out after a certain period of planting, usually in March-April. This process takes 2-3 days depending on the number of employees and the size of the land. Hoeing is usually done manually by family members and casual workers, garlic cultivation is the most labor intensive phase. Production costs are high at this stage, which requires intensive labor. If not only the garlic is planted randomly in the field, also ordered planting, the hoeing process can also be done mechanically.

Under the climatic conditions of the geographical area traditional methods can be used for garlic cultivation without irrigation in dry agricultural lands. However, when the “Taşköprü Sarımsağı” that is irrigated is grown, it is seen that the head size and yield of the “Taşköprü Sarımsağı” are considerably increased. Irrigation accelerates plant growth and stimulates tooth formation.

Diseases adversely affect yield and quality. The most common diseases in “Taşköprü Sarımsağı” are mold (rust) disease, fungal disease, wheat disease. Disinfection is very important to prevent these diseases. After the analysis of the soil prepared in November and December, base fertilizer is given between 30-50 kg according to the condition of the soil. “Taşköprü Sarımsağı” likes commercial fertilization and fertilizers such as phosphorus are given. So when the hoeing period comes, the plant is 10-12 cm and the roots go a little deeper, approximately 10-15 kilograms of nitrogen fertilizer is given. Evening or rainy hours are preferred for fertilization. Some farmers also provide animal manure, while other manure is given according to the needs of the soil. Potassium is often preferred because it improves quality; before watering and the plants are thrown into the leaves so as not to come. As a result, phosphorus, nitrogen and potassium which are called “branches, offspring, honey ball are used as fertilizer; phosphorus makes fertilization in the plant, makes nitrogen branches, ie greening, and finally makes potassium honey, that is, increases quality and durability and extends storage life. Excess fertilizer causes cracking. Therefore, it is important for the quality and productivity of garlic to give fertilizer by soil analysis by analysis.

“Taşköprü Sarımsağı” is expected to ripen from the first weeks of July; ripening of the leaves of the garlic plant is understood to begin to turn yellow. In this period, for better development of the heads and cloves, the above-ground parts are laid in the soil with the help of empty barrel or canister in a way that does not harm the “Taşköprü Sarımsağı” heads and cloves. Approximately after 2 weeks, after the dry part of the soil is thoroughly dried, “Taşköprü Sarımsağı” heads are carefully removed without damaging. If “Taşköprü Sarımsağı” is to be stored, the leaves are not expected to dry completely after harvest.

If the dismantling process is done by hoeing and waist method or by planting row method, it is also done with garlic harvesting machines. This process is usually done with garlic harvesting machines in Taşköprü. “Taşköprü Sarımsağı” is usually collected by women by hand, are bundled and dried in order to dry the field surface is arranged in neat rows. Even in the same region, according to the climate and soil structure, the harvest period change between 15-20 days. It matures more quickly in south-facing areas with high humidity. “Taşköprü Sarımsağı” is removed from the field with finishing the dismantling process from the beginning of July to the end of a month until about August.

For garlic, drying in the field is very important. When “Taşköprü Sarımsağı” is removed from the field before it is completely dry, then darkening, decay and quality decrease occur and the garlic does not last long in terms of storage. After the first drying is completed, “Taşköprü Sarımsağı” are collected from the field and taken to a cool and dry place where they are hung with poles. “Taşköprü Sarımsağı” should be away from moisture in order to avoid disease at this stage.

Weeding is the process of separating the rotten, dented, pale, low quality, defective, mechanically damaged ones in the harvested garlic. Weeding is carried out in the field or on the farm before being shipped to the market, garlic is cut by women using scissors and extracted by hand.
The dried garlic is collected and the roots are cleaned and re-tied. This process is also called sheaving. The sheaving process is the classification process according to the size and quality of garlic. The sheaving is also done by women. Produced garlic are divided into three classes according to the size and quality of their heads. Storage is in common warehouses, “Taşköprü Sarımsağı” can be stored in hangar, cardboard boxes or crates.

“Taşköprü Sarımsağı” has a longer storage life than other garlic and this period is about 10-11 months.

Some of the producers sell garlic from the field to garlic companies. These companies, which generally consist of family companies, market garlic to chain markets.The packaging process is carried out before marketing to these places, “Taşköprü Sarımsağı” is weighed and netted after they are separated into their lengths. On the other hand, “Taşköprü Sarımsağı” are also sold on the roadside. Garlic production, sales and marketing organization is of great importance.

Apart from the change per years, 3500-4000 families in Taşköprü region produce 20.000-25.000 tons of garlic each year. While 50 % of the produced garlic is instantly sold, the rest is offered for sale during the season by storing approximately at 8-10°C in storages and cellars which are damp and humid free. “Taşköprü Sarımsağı” in the storages do not lose it robustness until the end of April and early May.

1.6 Packaging

The sales of “Taşköprü Sarımsağı” can be made in “bond form” where garlics are knitted and fitted together in a kind of bond or in packed and labeled form. Samples for each sales type are listed below for your reference;



“Taşköğrü Sarımsağı” in bonds



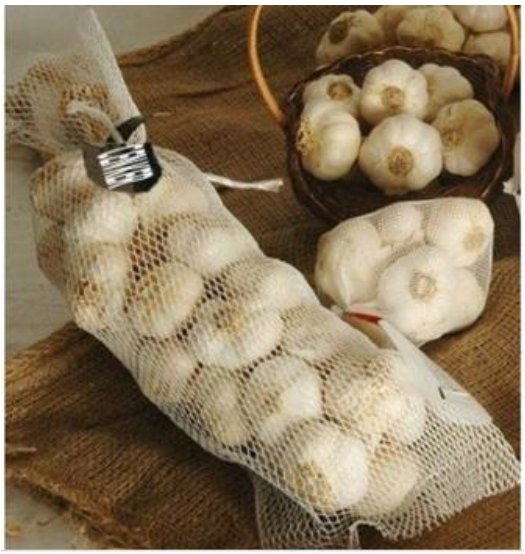
“Taşköğrü Sarımsağı” in bonds



Packed and labelled “Taşköğrü Sarımsağı”



Packed and labelled “Taşköğrü Sarımsağı”





Packed and labelled “Taşköğrü Sarımsağı”

1.7 Link

Garlic is the most common agricultural product cultivated in the district. Local farmers calls garlic ‘white gold’. International “Taşköprü Sarımsağı” and ‘Culture Festival’ is organized in September each year for almost 30 years, aiming to shine a spotlight on ‘white gold’ called garlic on international stage at Pompeipolis antic city in Taşköprü.

Specifities of the product

The specifities of "Taşköprü Sarımsağı" are its bitterness due to its high selenium content, its particular strong smell and its long conservation time.

Natural factors; climate and temperatures

Thanks to the influence of the Black sea climate on the geographical area "Taşköprü Sarımsağı" is thriving as the climate presents optimal temperatures for garlic cultivation. Annual average temperature is 9,7°C degree. The lowest average temperature in winter is -1,2°C degree, the highest average temperature in summer is 20,1°C degree.

The period of growing garlic in the region begins at the end of February and ends the last week of July. The average temperature is 4.2°C degree when the garlic cultivation begins in February. In May when the leaves are growing temperatures reach around 14.1°C degree which accelerates the growth, then 17.4°C degree on average in June and finally 20.1°C-degrees on average in July at the harvest period. The temperatures from May to July are ideal for an accelerated growth rate of the garlic and help to increase the number of cloves in the garlic due to the late blooming of the plant.

Indeed when the temperature rises above 25°C degrees, growth decelerates, leaves become yellow and the development of the vegetable is held up.

Precipitations

Rain and humidity conditions are suitable for growing garlic as the plant needs water at the period of planting and growth. April, May and June are the most rainy months of the geographical area (April: 51,4 mm May :74,1 mm and June :65,3 mm rain) and this impacts positively on the germination of plant and its quality. Thanks to these rain conditions "Taşköprü Sarımsağı" may generally be cultivated without irrigation.

July and August are dry months (28 to 30,4 mm rain on average) and this drought is necessary for drying the garlic. These precipitations conditions help to prevent the deformation of head structure of garlic and to increase the storing quality of garlic.

Humidity

Humidity conditions have a determining influence on the planting and growth of garlic. 60% humidity is ideal during the harvest period, indeed excessive humidity at the period of harvest may cause mould and putrefaction. Ideal storage conditions in order to maintain the quality of the garlic are around 10 °C and 60-70% humidity. In the geographical area the

humidity conditions are around 60% in July and August which corresponds to the harvest period. This enables the plant to dry quickly and protects the "Taşköprü Sarımsağı" from diseases.

The annual average humidity of the geographical area is 70%. This enables the "Taşköprü Sarımsağı" to have a high dry matter content and be stored without deterioration for several months after the harvest.

Soils

Garlic ideally grows in sandy-loamy soils which contain small quantities of humus and neutral soils with low humidity. Alluvial soils suited to garlic cultivation are extending on the Taşköprü plain and positively influence the yields for garlic cultivation. Moreover the region of Taşköprü presents a large majority of medium textured soils (loamy to sandy loamy), showing low alkalinity of 7,15-7,86 pH and low to medium level organic matter content. The soils of the district of Taşköprü which also have a high average Selenium content offer extremely suitable soil parameters for the cultivation of garlic. These factors influence the garlic quality including its selenium content (giving the garlic its particular bitter taste) and the high content of Allyl propyl disulfide ($C_6H_{12}S_2$) sulphurous and etheric oils contained in "Taşköprü Sarımsağı" which give it its particularly strong smell. As a comparative analysis shows the minimum selenium content of "Taşköprü Sarımsağı" (dry matter) is higher than that of garlics of the same variety cultivated elsewhere in Turkey.

Human factors

The population of the region of Taşköprü which is mostly a farming area has the tendency to migrate to cities. However thanks to the cultivation of garlic which requires abundant manpower this migration may be partly prevented. It is one of the rare products still cultivated in a cooperative way. The successive garlic production stages are labor intensive and at every stage of "Taşköprü Sarımsağı" production a human intervention is necessary. This human interference increases the qualities of the garlic and its production.

Separation

The separation of cloves from garlic is made by hand, in this way the quality of its seeds is increased as cloves do not get crushed as it often the case when a machine is used. Moreover when the separation process is made mechanically the cloves must be planted in the ground with no delay to avoid problem of germination and consequent bad development. Whereas when they are separated by hand the planting does not need to occur rapidly.

Planting

The garlic is propagated by using the cloves and not seeds like most plants. The cloves then go on to produce the head of garlic for the next season. Planting the cloves manually enables a regular distance between the garlics, this ensures that the clove is not placed in the ground upside down, which means that it grows better. Whereas when planting is done mechanically the sprout may be upside down with roots on top which means that shoot has to grow from the bottom up. This delays the sprouting to the soil surface and decreases productivity and quality.

Weed control and the soil ventilation

Weed control and soil ventilation are also done manually, this increases the quality of the garlic as it is not in competition with weeds while it is growing.

Drying

The geographical area has a traditional technique to dry the garlic bunches in the fields. Garlics are laid on the soil surface with machines specifically designed in our district. Farmers then make small bunches of garlic (local name: *elba*) and spread them on the field ground where they are left to dry in the sun for approximately 2 weeks. Garlics are turned upside down once a week so that they dry evenly. This technique is possible thanks to the specific climatic conditions described above avoids decay and enables the particularly long conservation time of the garlic. Later, the producers carry the sun-dried garlics to the warehouses where they are stored in the cold. Transportation to the warehouse process is done in the daybreak to prevent spills which are caused by moisture.

On top of these specificities it is important to note that "Taşköprü Sarımsağı" has a solid reputation and the district name is always associated with the garlic.

1.8 Name and address of the authorities or bodies verifying compliance with the provisions of the specification [Article 11/R.510];

Compliance with the technical specifications of the "Taşköprü Sarımsağı" has to be checked twice a year and every time in case of complaint by a commission of at least 3 people formed by the expert engineers and local producers from the Taşköprü Chamber of Commerce and Industry, Provincial Directorate of Agriculture, Agricultural District Directorate, Yalova Atatürk Horticultural Central Research Institute. They represent the competent authority for controls and they are habilitated by the Turkish authorities to perform these controls. The leading authority in organising these controls is Taşköprü Municipality.

1) **Atatürk Horticultural Central Research Institute of Yalova**

Süleyman Bey Mahallesi, Yalı Caddesi, 77100 Yalova Merkez/Yalova

Telephone: + 0226 814 25 20

URL: yalova.arastirma@tarimorman.gov.tr

2) **Taşköprü Chamber of Commerce**

Musalla, Zımbıllı Sk. 4/1, 37400 Taşköprü/Kastamonu

Telephone: 0544 881 91 89

URL: taskoprutso@tobb.org.tr

3) **Provincial Directorate of Agriculture of KASTAMONU province**

Saraçlar Mahallesi Bayındır Sokak No:2 37820 Merkez/KASTAMONU

Telephone: +90 366 212 86 89

URL: kastamonu@tarimorman.gov.tr

4) **Agricultural District Directorate of Kastamonu**

Tekke, Şht. Cevdet Üstündağ Sk., 37400 Taşköprü/Kastamonu

Telephone: +90 0366 417 10 36

URL: kastamonu@tarimorman.gov.tr

1.9 Labelling

The following information must be written or printed legibly and in an indelible manner on the packaging of "Taşköprü Sarımsağı"

- The trade name and address, short name and address, or registered trade mark of the company
- The lot number
- The name of the goods, "Taşköprü Sarımsağı"

PART I.2 ACCOMPANYING INFORMATION

2.1 PDO

2.2 COUNTRY OF ORIGIN

TURKEY

2.3 APPLICANT GROUP

TAŞKÖPRÜ BELEDİYE BAŞKANLIĞI
Harmancık Mah. M.Gazi Cad. No:2
Taşköprü / Kastamonu TURKEY

TYPE OF THE ORGANIZATION : MUNICIPALITY

Telephone: +90.0.366.417 10 58

URL: www.taskopru.bel.tr

"TAŞKÖPRÜ BELEDİYE BAŞKANLIĞI" represents the producers' group in Taşköprü district.

2.4 PROOF OF PROTECTION IN THE COUNTRY OF ORIGIN

Turkish Patent Institute has registered "TAŞKÖPRÜ SARIMSAĞI" as a PDO with the registration date 15/06/2010 and number 135. The details can be found on the website of the Turkish Patent Institute https://online.turkpatent.gov.tr/trademark-search/pub/#trademark_result_detail by writing and clicking on "Taşköprü Sarımsağı".

Furthermore, during the registration procedures with the Turkish Patent Institute, "TAŞKÖPRÜ SARIMSAĞI" application has also been published in the 03.12.2009 dated and 27421 numbered Official Newspaper of Turkey which can also be seen from the following link. http://www.resmigazete.gov.tr/main.aspx?home=http://www.resmigazete.gov.tr/ilanlar/eskiilanlar/2009/12/20091203-

4.htm/20091203.htm&main=http://www.resmigazete.gov.tr/ilanlar/eskiilanlar/2009/12/20091203-4.htm