

## OTHER ACTS

## COMMISSION

**Publication of an application pursuant to Article 6(2) of Council Regulation (EC) No 510/2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs**

(2009/C 39/10)

This publication confers the right to object to the application pursuant to Article 7 of Council Regulation (EC) No 510/2006 <sup>(1)</sup>. Statements of objection must reach the Commission within six months from the date of this publication.

## SUMMARY

## COUNCIL REGULATION (EC) No 510/2006

## 'HAJDÚSÁGI TORMA'

EC No: HU-PDO-005-0391-21.10.2004

PDO ( X ) PGI ( )

This summary sets out the main elements of the product specification for information purposes.

**1. Responsible department in the Member State:**

Name: Földművelésügyi és Vidékfejlesztési Minisztérium – Élelmiszerlánc-elemzési Főosztály  
Address: Kossuth Lajos tér 11.  
H-1055 Budapest  
Tel. (36-1) 301 44 19  
Fax (36-1) 301 48 08  
E-mail: zobore@fvm.hu

**2. Group:**

Name: Hajdúsági Torma Termékpálya Bizottság (Hajdúsági TOTEB)  
(Horseradish Product Line Committee)  
Address: Diószegi út  
H-4002 Debrecen  
Tel. (36-52) 412 919  
Fax (36-52) 442 545  
E-mail: parmen@parmen.hu  
Composition: Producers/processors ( X ) Other ( X )

**3. Type of product:**

Class 1.6 — Fruit, vegetables and cereals, fresh or processed

(<sup>1</sup>) OJL 93, 31.3.2006, p. 12.

#### 4. Specification:

(Summary of requirements under Article 4(2) of Regulation (EC) No 510/2006)

##### 4.1. Name:

'Hajdúsági torma'

##### 4.2. Description:

Plants authorized to bear the indication 'Hajdúsági torma' 'protected designation of origin' are the roots of the regional varieties of *Armoracia rusticana* (syn. *A. lapathifolia*), selected in the Hajdúság region through propagation by root cuttings. The product of the plant for human consumption is the root, or rhizome, which develops from the thickening of the preceding year's tap roots used for propagation; there is an approx. 180 day period between planting and harvesting. The horseradish varieties produced in the Hajdúság region have distinctive features such as: the thick, dark green, lush foliage twisting in its upper third section, the straight, cylindrical, light brown rhizome and the bone-white flesh. Its taste is never woody and its relatively low allyl isothiocyanate content causes its distinctive hotness, which — by analogy with mild-noble paprika — is also called 'noble-hot'.

As a result of the standardised cultivation technique (ridge planting method) that has evolved in the Hajdúság production region, 'Hajdúsági torma' has a uniform market appearance.

There is a 3-4 cm growth on the root cutting, which is called the 'head'; it has a cylindrical body of 1,5-5 cm in diameter and 20-35 cm in length. The ridge planting production method, which has developed over decades, differs from the mechanised, slanted method of planting applied in other regions of Europe, the 'Hajdúsági torma' can therefore be clearly distinguished by its appearance from horseradishes produced using other production techniques.

The horseradish produced in the Hajdúság region has a 30-32 % dry matter content. Dried grated horseradish has the following quantities of key minerals: (g/kg) P: 2,1; K: 25,3; S: 7,7; Ca: 5,9; Mg: 3,1. It also contains (expressed as a percentage by weight): 3,68 crude fibre, 0,34 crude fat, 2,2 crude ash, 1,08 sugar, 7,63 starch and 3,77 N. Its glucose-fructose-sucrose content is 11,8 % and its average mustard oil (allyl isothiocyanate) content is 14,4 g/kg. Its vitamin C content varies between wide extremes (26-150 mg/100 g) primarily depending on the climate conditions of the region and on whether the plant belongs to the northern or the southern sub-variety.

##### 4.3. Geographical area:

'Hajdúsági torma' is produced in a clearly defined, unbroken region within Hajdú-Bihar county. This is the Hajdúság production region, with the following municipalities engaged in production: Debrecen (Debrecen-Haláp, Debrecen-Bánk), Létavértes, Újléta, Kokad, Álmosd, Bagamér, Vámospércs; Hosszúpályi, Monostorpályi, Nyírábrány, Nyíraczád, Nyírmártonfalva, Nyíradony.

##### 4.4. Proof of origin:

The Hajdúsági-TOTEB is in charge of coordinating the interests of producers and traders. By developing a circle of expert producers, this organisation can meet market demands for both quality and quantity of product and by effectively supervising the producers, it ensures the uniform appearance of the product.

Producers keep an up-to-date production log throughout the entire production cycle.

The following information must be recorded in the production log:

- the name and identification data of the producer,
- the place of production (land registry number, area, etc.),
- the name of the crop previously grown,
- the variety produced (if it is known),
- the time of planting and harvest,
- the dates of inspections,
- membership of a trading house,
- the marketed quantity, the transferee or the buyer.

The trading houses must keep an up-to-date record of the entry of the horseradish so that the provenance of the horseradish and the quantities placed on the market can be identified (from the name and identification number of the producer). This record must be made available to the persons responsible for control.

The horseradishes are marketed in packages specifying the identification of the trading house and the identification number of each item.

At the request of a producer or distributor, the Hajdúsági-TOTEB will carry out an audit of the entire production process of the producer; if requirements are met, the product may be endowed with the distinguishing marking of 'Quality Controlled by the Hajdúsági Horseradish Product Line Committee'. This is based on the quality control system organised and carried out by the Hajdúsági-TOTEB, involving complex examinations (physical, chemical, microbiological) based on sampling, in cooperation with the county plant and soil protection service.

The Hajdúsági-TOTEB participates in monitoring compliance with regulations pertaining to the use of the geographical product designation and the legitimate use of the designation of origin.

#### 4.5. *Method of production:*

'Hajdúsági torma' is rendered unique by the special ridge planting method. Soil that has been replenished with nutrients is turned to a depth of 50-60 cm, then, depending on the structure of the soil, 30-40 cm ridges are produced at 90-100 cm intervals using a rotary cultivator or a ridging plough. The ridges are compacted using special rollers.

The propagating materials are planted in the ridges thus prepared. The propagating materials (root cuttings) are straight pieces of healthy roots, 25-30 cm in length and 5-10 mm in diameter, free from branching, cut at both ends, selected from the tap roots of the preceding year's produce.

The cuttings are collected in the autumn or spring, they are carefully selected and cleaned, the sprouting end is marked, they are cut and then forced to grow in batches of 100-200.

Planting takes place between the last 10 days of March and the end of May. Planting is always carried out manually: using a specially shaped planting iron, the cuttings are placed vertically in the soil, 3-4 cm below the surface, with the sprouting end upwards. The area so planted is protected against weeds with chemicals.

In 3-4 weeks after planting — when growth appears — a shoot selection is performed. At this point the cuttings are uncovered (down to 4-5 cm) in the ridges. Of the 1-5 shoots that have started to grow from their upper ends, the one that is most vigorous is retained and the rest are removed together with any collar roots. This is how each plant will have a 'single head' and the part of the shoot in the earth will grow toward the cutting vertically, which is a characteristic of the region.

During the rest of the growing season the plantations are carefully cultivated and protected against pests and disease.

An adequate quality and quantity can only be attained through irrigation, the technique of which — from flooding to the most modern method of drip irrigation — is freely chosen by the farmers.

Harvesting starts in mid-October and is usually completed by the first frosts. In some cases the horseradish is not harvested in the autumn for whatever reason, but this is not a problem since the plant will survive the winter until harvest in the spring without suffering frost damage or a drop in quality.

The harvesting process: after defoliation, the tap roots are cut at a depth of 50-60 cm below the ridge top using a U-shaped adapter hooked up to a tractor. The roots so lifted are pulled out manually and left there to dry for a few days.

Thereafter a commercial product is prepared from the produce as required by the buyer. The soil is removed from the product along with other dirt, the leaves are removed and then the tap roots suitable for propagation are collected. Only graded horseradish containing less than 5 % soil contamination may be taken to the receiving location.

The 'Hajdúsági torma' is graded and accepted from suppliers according to the following quality criteria. It should be noted that the nutritional content qualities of the various categories are identical, the only difference is in the appearance of the product. Class I horseradish is used exclusively for consumption as a fresh vegetable, while the other classes provide raw materials primarily for industrial processing.

Class I: The surface of the body of the horseradish is smooth, it has a cylindrical shape, has no lateral roots and is intact and healthy, it is over 20 cm in length and 25 mm in diameter. It may not be withered, and must be free of damage caused by insects or cracks. The tap roots have been broken off. The leaf stem remnants must be cut off the head with minimum damage to the horseradish body. Class II: All parameters are the same as those for Class I products except for its middle diameter which is over 20 mm. Class III: This class includes rhizomes over 15 cm in length and 15 mm in diameter, on which there are visible cut surfaces owing to the removal of roots, or which are slightly damaged by cracks or insects. Class IV: Poorly developed rhizomes and thicker tap roots. They may not have rotten spots, they are 10 cm in length and at least 10 mm in diameter. Carved quality: a quantity of horseradish bodies of Classes I and II whose damaged spots caused by 'fungi, rot, or insect bite' have been carved off. The removed part cannot be more than 1/3 of the surface of the horseradish body. Size: rhizome length over 17 cm, largest diameter over 20 mm. Root quality: length and diameter are irrelevant, it is free from foreign matter, mould and rotten spots.

'Hajdúsági torma' is packaged as required by the buyer, in Raschel (mesh) sacks or perforated foil sacks. According to market demand, before the Christmas and the Easter holidays Class I horseradish is also sold individually shrink-wrapped.

#### 4.6. Link:

Historical link: The horseradish brought to the Carpathian basin by the ancient Magyar tribes and the native horseradish found here were hybrids of wild varieties. Records of its production go back to the 17th century; it may have arrived in the Hajdúság region in the early 19th century. Horseradish production started to grow particularly in the late 1800s and the early 1900s in this region. Prior to the turn of the century, in the Hajdúság region almost everybody's garden had some amount of horseradish as a perennial plant. After the turn of the century, in the early 1920s the vineyard manager of Bagamér in the Várad chapter, Gábor Szilágyi ordered some 'tasty, noble' horseradish from Austria, acclimatised it, and propagated it within years through careful selection. The villages of the region also picked up production, as a result of which the present horseradish-producing region evolved by the 1940s and '50s.

Natural factors: Horseradish prefers low-lying areas with humid atmosphere and produces very good yields on loose soils, rich in humus nutrients and with good drainage. Among all environmental factors the soil requirements of the plant are the most significant. In fact the looser the soil is, the more regular and straighter the developed root becomes. The loose structure, aeration and drainage of the sandy alluvial-meadow and marshy-meadow soils of the Hajdúság production region are excellent for the production of the 'Hajdúsági torma'. When the tap root cutting continues to grow downward, having passed the foot of the ridge it is free to continue to grow in the loose soil without any obstacles, therefore its lengthwise growth does not stop, so the rhizome is always straight and will not be stumped or forked. The humus layer of the alluvial meadow soil is 100-110 cm deep, light in colour, the value of the humus is 1,5 % and the flowing subsoil water is at a depth of 120-140 cm from the surface. The planting of horseradish can be started earlier in these soils and the soil will not be airless, even in the case of wetter weather. The humus layer of the marshy meadow soil is 40-60 cm, dark in colour, with a humus value of between 1,5 and 2 %. The flowing subsoil water level is directly beneath the humus layer. These areas also provide good yields in drier years. This explains why, when irrigation used to be beyond the reach of farmers, the land still provided its produce — when the weather was rainy, on the alluvial-meadow soils, and when the growing season was dry, on the marshy-meadow soils. These circumstances contributed to the fact that horseradish production has been retained in the Hajdúság horseradish growing region for nearly one hundred years.

The slightly undulating plains with smaller forest areas create a so-called 'walking shadow' over the growing crop thus protecting it against strong sunshine and preventing excessive mustard oil formation. As a result the 'Hajdúsági torma' always has a hot taste without being excessively hot.

Human factors: Ridge planting is a unique method typical of the area surrounding Debrecen. Placing cuttings vertically in ridges ensures that rhizomes will be straight. This technology developed as a result of nearly one hundred years of 'reflection'. Faced with local conditions, farmers have always put their

efforts into exploring methods of reducing and substituting manual work related to horseradish production — work which is known to be extensive — by means of horses or machines. According to the pioneers of horseradish production, soil was turned to a depth of 80-100 cm, which could not have been easy to do in the first decades of the century. Ploughs used to make ridges and to pull out the horseradish were not available on the market: they were custom-made by local smiths. The development and improvement of the production technology that has enabled the 'Hajdúsági torma' to become so unique has been passed on and fine-tuned from generation to generation. Local varieties have developed as a result of continuous and conscious selection through propagation by cuttings which — among the existing climatic and soil conditions — provide good yields with the best possible nutritional content qualities.

4.7. *Inspection body:*

*Mezőgazdasági Szakigazgatási Hivatal* (Agricultural Office), as designated inspection body for fruits and vegetables

Name: Hajdú-Bihar Megyei Mezőgazdasági Szakigazgatási Hivatal  
Növény- és Talajvédelmi Igazgatóság  
(Hajdú-Bihar County Agricultural Office, Directorate for Plant and Soil Protection)

Address: Böszörményi út 146.  
H-4032 Debrecen

Tel. (36-52) 525-921

Fax (36-52) 417-613

E-mail: Dienes.Gyula@hajdu.ontsz.hu

4.8. *Labelling:*

- 'Hajdúsági torma',
- 'Protected designation of origin' or its abbreviation (PDO),
- name of trading house,
- identification number of item, and in the case of examination carried out by the Hajdúsági-TOTEB,
- 'Hajdúsági Torma Termékpálya Bizottság által ellenőrzött minőség' ('Quality controlled by the Hajdúsági Horseradish Product Line Committee').

In the case of the Raschel sacks, Class I, II, III and IV products are packaged in green, red, yellow and green sacks, respectively. The product of carved quality is placed in yellow sacks while the root quality product is placed in sacks of any colour.

---