PRODUCT SPECIFICATION

"Vale of Evesham Asparagus"

EC No:

PDO () PGI (✔)

This document sets out the product specification.

1 RESPONSIBLE DEPARTMENT IN THE MEMBER STATE

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2 GROUP

Name: Vale of Evesham Asparagus Growers

Address: Woodfield Farm, Birlingham, Pershore, WR10 3AG

Tel.: 07887 747917

Fax:

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Composition: Producers

3 Type of product

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

4 SPECIFICATION

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

4.1 Name:

"Vale of Evesham Asparagus"

4.2 Description:

Vale of Evesham Asparagus is the name given to green asparagus which has been grown within the defined geographical area. Vale of Evesham asparagus is produced only between the months of April and July.

Vale of Evesham asparagus can vary from light green to dark green in colour, with purple tips depending on the speed of growth and night time temperatures.

The shape can vary according to variety in very subtle ways. Typical shapes_are long thin spears from 8mm diameter mid spear to 24mm. The maximum length for harvest is 22cm.

The flavour of raw asparagus resembles that of fresh peas and is brittle and crunchy to the taste. Cooked asparagus takes on the full flavour of mellow nutty artichokes, and has the aroma of faint grass and fresh peas which can vary according to the temperature during which it is harvested.

Vale of Evesham Asparagus is sold either in a banded bundle, a flow wrapped pack or a plastic sleeve for supermarkets and naked in bundles for farm shops. The product is to be banded into 4mm diameter groupings and has to meet the standards of Evesham Asparagus quality specification as follows:

Dimensions

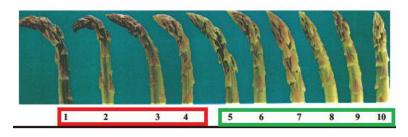
Product will be graded into evenly hand trimmed bundles with a length between 15 and 22 cm. Spear diameters within the bundle will be within 4mm range as follows, 4-8, 8-12, 12-16, 16-20, 20-24mm measured from mid spear.

Quality Attributes

Spears are to be clean fresh and whole, with no signs of breakdown, live pests or progressive disease.

Curvature and seeding tolerances are shown in amber and green below.

CURVATURE



SEQUENCE OF SEEDING TO GOOD TIPS



4.3 Geographical area:

The area is defined by the district areas of Malvern Hills, Wychavon and Stratford upon Avon district council boundaries.

(Map of area defined)

https://www.google.com/fusiontables/DataSource?docid=1hwA0OPUJYz-zZ5rbJ8UltojrDKNA-uQ11f7K7ltY

4.4 Proof of origin:

Crown Origin

The asparagus crowns used as planting material must be certified by suppliers as being non-genetically modified. Suppliers are expected to maintain traceability of this information should it be called on at any time. Crown producers must keep records of all pesticide applications made to their plants during the propagation stage, which is recommended by the Red Tractor Farm Assurance Standard.

This recommendation has now been modified by the Board of Red Tractor allowing the plant producer to provide a written statement confirming their plants have met legislative requirements and that they hold application records.

Crown Delivery

When the crowns arrive on the farm they are delivered in nets by grade order. A grower will typically order either all 'A' or all 'B' crowns. 'A' crowns are larger and cost more per crown to buy as they are generally considered to provide a higher yield and create full yield potential faster. Each grower must make this personal decision based on their own records of yield per area planted.

The crowns must be free of soil, clean and not showing signs of storage mould and not have any visible signs of root damage. The delivery note must state that the crowns are certified virus free.

The crowns are then checked for weight to ensure that the grower has bought what he paid for.

Production and Supply

Each farm will keep field records of varieties planted, age of planting and subsequent yield and costs.

Each grower keeps records of good agricultural practice. Fertiliser, pesticide and planting records must be kept along with traceability records for the harvests.

When the asparagus is transported, delivery notes and stock records are kept for each load.

4.5 Method of production:

Growing asparagus is a long term commitment and a labour intensive crop to grow. The crowns are grown from seeds for a year, transplanted and then grown for three years before harvesting can begin. It is also a perennial plant so the asparagus growing land is permanently dedicated to just that one crop, often for many years.

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Seeds:

Asparagus plants start their life as seeds sown by a commercial plant raiser who produces crowns. These take a year to produce.

Crowns:

Crowns are transplanted to their final production area in April and planted in furrows down the length of the chosen field. It is essential that the grower plants out the crowns as soon as possible to prevent any unnecessary dehydration to the crowns which may hinder their swift establishment. Once planted the crowns are kept weed free.

Soils must be light and free draining to ensure that the roots establish fast with little hindrance of obstacles in the ground. The soil must be prepared carefully when not too wet with sub-soiling to improve drainage and are then made into "beds" ready for planting. Fields are rotated, but generally cannot be replanted with asparagus for around 30 years due to the disease pressure built up in the soil. The best asparagus fields are stone free as this allows unhindered growth of asparagus spears through the soil to the surface. This is important as too many stones will impair spear quality. The Vale of Evesham is an important vegetable producing area as the soils are light, free draining and warm up quickly in the spring. The soil type is typically light sandy land overlying Devonian red sandstone. This gives the ideal environment for the crowns to develop deep fibrous roots that will enable correct establishment of the crown and maximum yield and quality during harvest. Heavier land outside the Evesham area is unsuitable as it does not drain freely enough for the crowns and this land when planted for asparagus production suffers more water logging resulting in early crown death and crop decline. Heavier land, being wetter, will take longer to warm up and result in poorer yield and more likely to produce fibrous spears.

Year 2

In the second year after planting, growers can take a first harvest cut for a period of 1 to 2 weeks then leave the crown to regenerate. The first cut is taken from the moment the spears emerge in April and the produce is sold along with the rest of the harvested fields in full production.

Year 3

By the third year yields take place between April and June.

Harvest:

Harvest time begins when the first spears show in April until June. From the end of June growers leave the still emerging spears to grow into asparagus fern and regenerate the crown to produce enough energy for the following year's crop. This cycle is repeated until the yields dwindle and the field is no longer viable to harvest.

When the spears are ready, they are cut by hand with a knife. At the start of each cropping season all the harvesters are trained in the skill of cutting asparagus. A short serrated knife is used, firstly to measure the correct height of the spear and secondly to allow a push pull action to swiftly cut the spear just below soil level without knocking the spear into the soil. The spears are then laid in field trays, tip facing tip, to avoid soil getting into the edible end of the vegetable.

This job is skilled and needs to be done carefully to avoid damaging the root structure below the soil. The cutting consists of the knife being pushed into the soil at an angle just below soil level in one movement. This allows a clean cut without breakage and the white "butt" heals quickly to seal in the spear juices and retain the shelf life and quality of the spear. After harvest the spears must be removed from the field as quickly as possible and refrigerated to maintain life and quality. The spears are stored in high humidity for up to a week and are not washed until marketing is arranged. The quality deteriorates fast post washing so it is imperative that field stocks are managed locally and washing and processing must occur as close as possible to orders being fulfilled to provide the best shelf life and quality to end customers.

Transport of asparagus is clean and food appropriate. The asparagus is stored in humid cool stores to retain quality. Box format and bundle size vary according to market requirements.

4.6 Link:

The flavour and texture of Vale of Evesham asparagus is primarily driven by the growing conditions and soil environment of the Vale of Evesham, as well as knowledge and experience of how best to grow the product. The Vale of Evesham has a long history of asparagus growing, and much tradition surrounds the product. The Vale of Evesham enjoys a reputation for producing asparagus of the highest quality.

The microclimate of the Vale of Evesham and the prevailing soil types are critical factors in assuring the quality of the product. Asparagus grown in the geographical area is defined by the unique fields of deep sandy soil that are derived from the underlying Devonian sandstone in the river basins of the Severn (Worcestershire) and Avon (Worcestershire and Warwickshire). The sandy soil is well drained and warms up quickly in the spring temperatures.

The flavour of Vale of Evesham asparagus is composed of primary metabolites produced directly from photosynthesis, for example sugars; and secondary metabolites, produced by the plant in response to environmental conditions and often as a reaction to plant stress. The microclimate and soil environment in which the crown is grown is therefore of critical importance in the development of the products flavour.

The Vale of Evesham provides a temperate climate with warm dry summers which favour photosynthesis during the fern period and allow the fern to remain green into the early autumn, this late fern allows a long time for bud formation and leads to the range of spear sizes characteristic of vale of Evesham asparagus as well as giving a good carbohydrate fill to the root system which leads to a sweet pea like flavour to the crop of the following year. The average rainfall for the region is 700mm which is well distributed through the year and removes the need for irrigation during the fern period (July – Oct). Summer temperatures range from 15-30oC. Springs see a gradual build up of soil temperature which gently breaks crown dormancy and produces an early April season start. Temperatures during the season vary over a wide range and this variance in temperature combines with the soil characteristics to provide a degree of mild stress that promotes the classic flavour of Evesham asparagus.

The sandy soils of the Vale of Evesham asparagus fields provide ample depth of soil for crowns to establish deep root systems with which to store the sugars produced during the summer. This promotes the health of the crown and gives an additional sweetness to the crop. They warm well in the spring, allowing for an early season. The sand fraction warms with a sharply defined thermal profile through the soil and which changes the growth rate of the spear as it emerges through the profile. This all

contributes to the production of secondary metabolites (including the balance of anthocyanins) which give the asparagus from the Vale of Evesham its distinctive flavour.

The reactive nature of the soil means soil temperatures react quickly to changing day and night temperatures and provide another gentle stress to the crown in the spring which aids development of flavour and promotes the distinctive Vale of Evesham character. The absence of a significant clay fraction means the soil provides less mechanical resistance to the spears and allows relatively free movement of the emerging spear through the soil. This gives the spears a relatively even diameter and firm delicate texture.

The unique combination of soil and microclimate produce the fast growing spears and flavour and texture that are characteristic of the Vale of Evesham asparagus. Fields are rotated, but generally cannot be replanted with asparagus for around 30 years due to the disease pressure built up in the soil. The best asparagus fields are stone free as this allows unhindered growth of asparagus spears through the soil to the surface. This is important as too many stones will impair spear quality. Site selection is very critical and not every field will suit production of asparagus for these reasons. It is also important that growers consider the environment and select only fields that have the correct aspect that does not encourage soil erosion into water courses. Fields must be generally slightly sloping for the best aspect. It is no accident then that the asparagus fields are located in these river basin areas that best suit the production of asparagus.

In order to achieve the best results, the grower, using his experience of each field, needs always to take care over deciding when to pulverise and desiccate the previous year's fern and when to make up the beds for the following harvest season. It is important that the soil is dry enough to take the weight of the tractor so that compaction of the roots is minimised. A wet soil that is made into asparagus beds will drain poorly and compact very quickly with subsequent rains and when walked on during harvesting. The grower needs also to understand the risk of wind exposure for certain varieties that lack the strength in fern to remain upright for the photosynthetic period post harvest. Varieties low in Lignin must not be planted in windy sites as they will fall over in the fern period of growth and not produce enough carbohydrate in the root to maintain economic production in the following year.

At the start of each cropping season all the harvesters are trained in the skill of cutting asparagus. A short serrated knife is used, firstly to measure the correct height of the spear and secondly to allow a push pull action to swiftly cut the spear just below soil level without knocking the spear into the soil. The spears are then laid in field trays, tip facing tip, to avoid soil getting into the edible end of the vegetable.

During the season the grower must use his skill to determine when to harvest each field. During cool periods where the soil temperatures hover around the 10 degree centigrade mark, the production is slow and harvesters will need to be sent onto the field other every day in order to cut the correct length for spear production. However, if the soil temperatures increase to over 14 degrees centigrade then a "flush" occurs and growers must look to harvest fields as fast as possible, sometimes twice in a day if necessary.

The Vale of Evesham is renowned for its production of this most luxurious vegetable - asparagus or "Gras" as it is locally known. Evesham is the only town centre in the United Kingdom with an asparagus field within its boundaries, and such is the crop's importance to the economic and cultural history of the Vale of Evesham, that a major event celebrating this majestic vegetable has developed attracting thousands of

visitors from all corners of the world. The festival is held in the region to promote this crop and a community interest company, of which all applicants are members, with the sole aim of promoting asparagus within the area. St George's Day sees the launch of the Asparagus Festival with an Asparagus Run throughout the Vale.

In Bretforton, the 650-year-old Fleece Inn holds an annual Asparagus Auction that has been held for at least 35 years. The finest local spears or "buds of gras" are carefully tied with willow strips into traditional bundles and auctioned or raffled in aid of the Bretforton Silver Band. The most ever paid for a bunch was £750, by the Round of Gras pub in Badsey, which claims to be the world's only pub named after a bunch of asparagus. Many other asparagus related events take place throughout the Vale between 23rd April and 21st June each year, the harvest period, offering the opportunity to taste, buy, cook and learn about one of the nation's most sought after delicacies.

Asparagus growing in the Vale of Evesham is a tradition whose longstanding history can be traced back to 1768 when Arthur Young, the then Secretary of the Board of Agriculture, visited the town. In his book *A Six Months Tour of the North of England*, published in 1771, he tells us that asparagus was carried from Evesham to Bath and Bristol to be sold. A letter from an Evesham writer to the *Morning Chronicle* newspaper, 30 August 1782, also mentions asparagus sent from the town to Bath and Bristol.

W Pitt in his *General View of the Agriculture of the County of Worcester* (1813) saw several flats of asparagus in the fields. (A flat in this context refers to a large stretch of level ground.) In 1830 the Royal Horticultural Society awarded a medal to Anthony New for his fine specimens of asparagus exhibited at shows of the Vale of Evesham Society in this and the previous year. (See Gaut: *A History of Worcs Agriculture*, page 294).

With the rapid growth of the market gardening industry during the last quarter of the 19th century, the acreage of asparagus being grown in the Vale of Evesham also increased. 'The L.B.G. Story' (Littleton & Badsey Growers Ltd), by C A Binyon tells of the historical association the Vale of Evesham has with the production of Asparagus. From 1925 until 1981 the Vale of Evesham Asparagus Growers Association existed for the purpose of promoting asparagus production in the area.

4.7 Inspection body:

Name: Worcestershire Regulatory Services - Trading Standards

Address: Wyre Forest House, Finepoint Way, Kidderminster,

Worcestershire DY11 7WF

The inspection body conforms to the principles of EN 45011 standard.

4.8 Labelling:

N/A