



With Thanks to :  
Keith Costello  
Pea Consultant



## The life story of the British Pea—You won't Pealeave— it!

### *There are five types of combining peas grown in the UK*

**Marrowfats** – large dimpled boxy shaped grain with a blue/green seed coat. Primarily grown for human consumption, being used for dry grocery sale (fish and chip shops), canning has a large processed or mushy pea and for snack food production in UK or Asia



**Large blue or green peas** – smooth, large round grain with a blue/green seed coat. The peas are used for human consumption has a canned or packet product, for micronising, a process which produces a high protein feed for certain animal rations or pet foods and for the animal compounding market



**Small blue peas** – small smooth round grain with a blue/green seed coat. Produced in small quantities for canning as a small processed pea or for the pigeon trade



**White/Yellow peas** - smooth and round with a white/yellow seed coat. Primarily used in animal feed but small quantities used for canning as “pease pudding”, as split peas in soups and prepared meals and more recently as a flour for the baking industry.



**Maples** – small round or dimpled grain with a brown seed coat. Small area grown to produce peas for the pigeon trade and specialist culinary uses.



## PEA STORY

### **Pollination**

Peas are self-pollinating, they don't depend upon insects or the wind to help with the process.

### **Soils**

Peas like a free draining, medium (silty, clay loam), friable soil with a pH greater than 6.5

### **Rotation**

Minimum of 1 in 5 years, commonly 1 in 6 to reduce the risk of building up soil borne pests and diseases

### **Fertiliser**

Peas are a leguminous crop, they require no manufactured N (nitrogen) fertiliser, but do require P (phosphate) and K (potash)

### **Cultivations – Autumn (September – October) or (February – March)**

Peas are a “Spring” sown crop.

In preparation to produce a good seed bed the spring, the fields are often ploughed in the autumn to benefit from natural weathering and to minimise compaction (a very hard layer of soil several centimetres below the surface).

*Autumn ploughed field*



Some fields on lighter soils where winter stubbles are required may be ploughed in the spring prior to sowing the peas.



The majority of fields are ploughed but increasingly on some farms the growers prefer to use min-till cultivations or “direct drill” into the soil.

*Min-till cultivation*

### **Sowing – March - April**

On ploughed fields the seed beds are prepared by using a pre sowing cultivation prior to the pea seed being sown using a “seed drill” of which there are two main types, trailed or combination mounted.

*Pre Sowing Cultivation*

*Trailed Seed Drill*

*Combination Seed Drill*



## PEA STORY

### Pea Seed

The seeds are sown evenly in 12.5 – 15cm rows at a depth of 5-7 cm.

Pea seed



### Rolling

The field is rolled to level the soil, conserve moisture and to leave an even surface ready for spraying the field with a pre-emergence herbicide to control the broad leaved weeds.



### Agronomy (April – May)

Pea seeds need moisture (water), warmth (+7C) and nutrients to grow.

Within a few days of sowing the pea has swollen and the first root (radicle) begins to emerge from the seed.

Radicle (root)



The root continues to grow and soon the shoot (plumule) is visible.

### Growth Stage – Emergence

Within two to three weeks the plumules break through the soil surface and the first enclosed leaf can be seen.



### Growth Stage - 2<sup>nd</sup> node

One week later – the pea plant has produced 1<sup>st</sup> and 2<sup>nd</sup> pair of true leaves, some secondary roots



Pea root nodules



### (May - mid)

### Growth Stage - 5<sup>th</sup> node

Plants are growing vigorously, they have five pairs of true leaves a good fibrous root system with lots of root nodules containing rhizobia, a nitrogen fixing bacteria present in the soil.

This is a “symbiotic relationship” between certain plants, primarily legumes and the bacteria which converts nitrogen in the atmosphere into compounds which the pea plant can utilise to help it grow.

Pea crop

