Pea agronomy guidelines.

Drilling date.

There is no magic drilling date but if the soil conditions are right then the first week in March onwards is the time to drill. The soil temperature needs to be high enough to encourage quick germination and emergence. This reduces the damage done by thrips, weevils etc and ensures better crop competition for weed control.

Earlier sown peas also tend to suffer less from pests, and mature in better weather conditions. However, peas are highly susceptible to being ‘mauled’ in, resulting in poor crop establishment and poorly developed root systems (sometimes associated with root diseases such as *Fusarium* and *Verticillium*) leading to low vigour, and consequent low yields.

Plant populations.

Optimum plant populations are very important with peas. The cost of the seed is a factor in calculating the ideal plant count which varies with variety and type:

- Marrowfats: **Kabuki** 65 plants per M2
- Large Blues: **Daytona** 75 plants per M2
- Maples: **Jaygee** 95 plants per M2

Seed Treatments.

High value crops need to be protected from fungal diseases and prevention is better than cure. Fungicide seed treatments are very cost effective in pulse crops.

- Thiram would be the choice on varieties with good resistance to Downey Mildew grown in a low risk situation. It controls Damping Off.
- Wakil XL offers a prophylactic control of Damping Of, Aschochyta and Downey Mildew. It is systemic and has twin mode of action. Wakil XL controls Downey Mildew for several weeks.
**Fertiliser**

As a general rule, fertiliser is only required where soil indexes are low. No nitrogen is required; P & K would need to be worked into the soil to get maximum benefit in low index situations.

On poorer soils, sulphur can be deficient, and ammonium sulphate can be used at a rate of 80 kg per Ha. At this rate, the nitrate will not affect nodulation (according to the PGRO).

Peas respond well to nutrient mixes. Mixes containing Molybdenum at 4 - 6 leaves before flowering are particularly beneficial as molybdenum maximises the *Rhizobium* activity. Boron and cobalt are also beneficial for *rhizobium* activity.

Marsh spot is caused by Manganese deficiency and causes a brown spot in the peas that can render them of no value to the human consumption market. Keep Manganese rates high, especially on Mn deficient, lighter soil types, and apply at early flowering and again at early pod set. Further applications may be necessary. Additionally, on high pH soils, Manganese will lock up and not be available to the plant.

**Crop Protection.**

Agrochemical advice and crop recommendations for peas are best sought by contacting the PGRO and your agronomist. We can outline the areas where agrochemicals are needed to control weeds, pests and diseases, however specific recommendations should come from these sources. There are no restrictions as to what can be used on human consumption peas as long as the products are on the Approved List and the manufacturer's recommendations are followed. We would not allow Glyphosate to be used as a desiccant without specific permission as it can have a detrimental effect on the pea's ability to rehydrate. This has consequences for both seed and HC.

**Weed control.**

Pre-emergence weed control is much preferred as it removes weed competition early and gives better control of some weeds such as Knotgrass and AMG. Adequate soil moisture is needed to gain optimum activity.

Jim Scrimshaw at the PGRO is very knowledgeable in the area of weed control options in peas and we recommend that he would be the best contact for these discussions. 01780 783099.
**Pest Control.**

**Pea and bean weevil:** Need not be controlled in most years. U shaped notches on the leaf margins indicates the presence of adults but it is the larvae feeding on the root nodules that causes yield loss. Spray treatment.

**Pea Thrip:** Attacks are worse in slow growing conditions causing distorted and gnarled emerging leaves. Spray treatment when four or more thrips per shoot.

**Pea Moth:** Control is essential in peas destined for human consumption or seed production. The use of pheromone traps sited in the crop from mid-May will detect moths. Spraying at first pod set and flat pod. PGRO give guidance and spray dates which need following up 10-14 days later. PGRO phone number 01780 783099.

**Pea Aphid:** Must be controlled to eliminate severe yield loss from direct feeding of honeydew build up and virus transmission. Spraying thresholds for spraying are useful and can be reached before flowering at 20% plants infested.

**Pea Cyst Nematode:** A very persistent soil borne pest often causing severe losses in yield. Best control method is to crop rotate on pulses to a minimum of a five year cycle.

**Disease Control.**

This becomes very important in wet years

**Leaf Spot and Botrytis:** Foliar spray at first pod which may need a second application in some years.

**Powdery Mildew:** Not normally a problem. It can come into the crop late on but does not often cause economic damage. Can make the plant hang on delaying harvest.

**Downey Mildew:** Can cause severe yield and quality loss. A seed treatment with Wakil XL is well worthwhile. A long rotation will be needed as five years will not reduce the need for caution as the soil borne phase is persistent.

**Harvest.**

Desiccation of crops is well worthwhile to even up the crop before combining. Desiccation will not advance seed maturity.

Glyphosate is not recommended for HC or seed crops. It also is slow to act and can make the crop brittle leading to lodging if harvest is delayed by the weather.

Reglone (Diquat) is the preferred dessicant and is quick acting and is best used without a wetter to avoid product creeping onto the seed. Peas should be below 45% when applying.

Combine concaves are normally set wide open and drum speed slowed to reduce physical damage to the peas.
Storage.

Quality standards are:

Moisture max 16%
Admixture: max 2%

Bleaching: REFER TO CONTRACT FOR THE SPECIFIC VARIETY.

Peas can be stored for up to 4 weeks at 17% but for longer term storage 15% is advisable. Maximum temperature for drying would be 24 degrees. Care needs to be taken not to over dry or cause mechanical damage. Peas can be quickly dried down to the required moisture with ambient air on a floor drier. If they are no more than a metre deep 1% reduction per day is easily achievable. Once they are dry they can be pushed into a deep heap.

Please ensure that the peas can be stored until called for. We can sometimes accommodate early movement by arrangement at time of booking the contract. We do, however need a supply all through the year to our factory.

General.

It is very important to match varietal choice to your farm conditions. Soil type, fertility, elevation, geographic location and previous cropping all play an important role. A vigorous variety can do well on light soil and be a disaster on very fertile conditions. Getting the right variety established at the right plant population is critical for success.

Varietal choice also is important when traits like earliness of harvest and colour retention are concerned. Length of straw can be vital in relation to the soil in some years. DAYTONA has an industry leading level of colour retention as does KABUKI. The value of the crop in this respect is massive.

We are here to discuss all aspects of the pea crop with you not just to sell a variety that may not be right for you. All the crops will come into Long Sutton for processing through our modern state of the art factory. We want you to attain the best Gross margin possible from your pea crop.

Peter Busfield
Commercial Manager 01406 362141 07766 168110
Peter.busfield@dunns-ls.co.uk