

## Cultural Details: Lettuce (Glasshouse)

VHT008

### Introduction

All year round cropping of lettuce under glass has been made possible by the development of 'short day' varieties tolerant of low light levels in winter, and 'long day', heat tolerant types for the summer. Moles Seeds offer a selection of butterhead varieties to cover all year, and a crisp variety for spring cropping. All are sold as pelleted seed. Key factors are good quality glass, fertile, weed-free soil irrigation, heat for winter and good ventilation in the summer. Soil pH should be in the range 6-7, and it is advisable to have the soil analysed prior to planting, to indicate fertilizer need. Preventative fungicide application may also be required.

### Programming

As an example, a short day variety such as Brian may be sown from August through to February, for cropping October to April. A long day type such as Frank may be sown between January and August, for cropping end of April to mid-November.

### Propagation

Seed is sown into peat blocks, or direct into borders. Optimum germination temperature is 13-16°C. A third option is to use a growing room, where seeds are sown into trays, then put in blocks, or sow in blocks directly, once germinated are placed under continuous light. Plants are fed and watered regularly, and should be ready for planting in about 4 weeks. This allows production of young plants to a schedule, regardless of external conditions. CO<sub>2</sub> enrichment of growing rooms may also improve growth.

### Planting

The young plants are generally planted up into a bed, 5-6 rows wide, spaced around 22-25cm centres. Irrigate the crop well, especially in light soils, but not too much or root damage will be encouraged. Ventilate during hot weather, aiming to keep temperatures as even as possible to avoid tip burn.

### Common pests and diseases

Aphids - several species cause crop damage, either directly by leaf distortion or contamination, or indirectly by spreading viral disorders.

Cutworms (generally Turnip Moth caterpillars) damage plants by cutting through and damaging or severing the stems of young lettuce.

Slugs may be a problem especially in warm, moist conditions.

Springtails may occur in sufficient numbers to damage roots by feeding on them.

Downy Mildew ( Bremisia ) can be detected by the presence of pale, angular marks on older leaves. Whitish spores can be visible under the leaves, patches bordered by the leaf veins. Choose resistant varieties.

Botrytis (Grey Mould) can cause total collapse of the plant, with dead or dying tissue becoming covered in the characteristic grey spores.

Rhizoctonia can cause damping off of the seedlings, or slimy rot of the stem and leaf bases.

Monitor the crop closely for signs of attack, and treat with a suitable chemical, according to the manufacturers' recommendations.

Information provided for guidance only, as cultural practices and climatic circumstances vary.