

Understanding potato crop growth stages

Optimise yield and quality and profit • Reduce risk and control costs
Save money on products, time and applications

Designed for:

Agronomists, potato business employees, supply chain employees, farm managers and farmers

Entry requirement:

An intermediate course best suited to those who are **able** to demonstrate some practical experience

Price:

£120 + VAT

Duration:

A half day classroom-based course

CPD points:

6 BASIS points; 1 NRoSO point

Learning outcomes:

At the end of this course participants will understand:

- Key aspects of potato growth and development
- How to use knowledge of crop growth to guide agronomic decisions including seed rates and fertiliser requirements
- Factors limiting crop productivity and quality

Content:

Classroom module 1 (half day):

- Link between crop management and potato growth and development
- Characteristics of potatoes (e.g. clonal, perishable)
- Growth keys (e.g. BBCH)
- Seed (dormancy, apical dominance, physiological and chronological age, sprouting, storage temperature, pathology, size, cutting)
- Emergence (soil temperature, planting depth, pathology)

- Above-ground morphology (main stems, branches, flowering)
- Below-ground morphology (roots, stolons, tubers)
- Root growth (soil conditions, variety)
- Leaf appearance (temperature, variety, nutrition)
- Tuber initiation (definitions, timing, duration, variety)
- Crop cover (leaf area index, ground cover)
- Dry matter accumulation (radiation use efficiency, water, pathology)
- Partitioning of dry matter (nitrogen, variety, time, harvest index)
- Development of yield (rate of bulking, factors affecting)
- Tuber dry matter concentration (variety, nutrients, change with time)
- Tuber populations (relation with stem population, variety, environment)
- Tuber size distributions (mean tuber size, uniformity, marketable yield)
- Senescence and harvesting (haulm destruction, skin set, bruising)
- Storage (suberisation, weight loss, pathology, biochemical changes)

Trainer:

Dr Mark Stalham, Head of Potato Agronomy Group, NIAB CUF

PR16