Arid Climate Greenhouse Summer School (July 6 to July 17, 2026)

Location	Delphy Improvement Centre, Bleiswijk, The Netherlands
Format	On-site, theory + exercises + practice + guest sessions
Early bird	10% off before April 1, 2026
Deadline	May 15, 2026

Program agenda

Week 1: Core operating system

Day 1: Orientation and operating model

Key topics

- The greenhouse as a controlled production system
- Weekly management rhythm, KPI dashboard, reporting, corrective action system

Practical

- Baseline diagnostic using a standard KPI pack

Outcomes

- Explain main production constraints and risk factors in hot and dry climates
- Use a basic KPI checklist to assess operational maturity and identify priority gaps

Day 2: Climate steering, light and energy

Key topics

- Light for production: DLI, shading, screens, crop response
- Climate steering: temperature, humidity/VPD, ventilation, CO2
- Dry-climate focus: midday heat strategy, night strategy, condensation risk

Practical

- Interpret radiation and climate graphs, propose a 24-hour strategy

Outcomes

- Interpret climate graphs (temperature, humidity, VPD, CO2) and identify typical steering mistakes
- Translate radiation and light conditions into practical crop and climate decisions
- Propose a 24-hour strategy balancing crop performance, water use, and climate risk

Day 3: Industry day

Purpose

- Broaden perspective, show real-world execution, connect participants to the Dutch ecosystem

Activities

- Field visits and case studies
- Panel and networking

Outcomes

- Summarize real-world success factors and failure modes from commercial operations in arid regions
- Ask sharper questions about operations, staffing, suppliers, and performance management

Day 4: Rootzone and irrigation strategy

Key topics

- Substrate and rootzone dynamics, pulse strategy, drain and EC logic
- Dry-climate focus: high ET day, water efficiency trade-offs

Practical

- Build an irrigation plan from a crop stage and weather pattern

Outcomes

- Build an irrigation strategy (timing, frequency, targets) based on crop stage and weather conditions
- Explain how substrate and rootzone behavior affects water uptake and plant balance
- Verify whether irrigation execution is correct using basic measurements and trends

Day 5: Plant nutrition

Key topics

- Water quality interpretation, nutrient solution logic, sampling and corrective actions
- Dry-climate focus: bicarbonates, sodium/chloride risk management, recirculation considerations

Practical

- Interpret lab results and design a monitoring cadence

Outcomes

- Interpret a water analysis and identify the main risks for dry-climate production
- Describe a monitoring cadence for nutrient solution and rootzone tracking
- Define corrective actions when key indicators drift (solution stability, salinity risk, imbalances)

Week 2: Application by crop group and execution excellence

Day 6: Vine crops and soft fruits

Key topics

- Crop steering routines, quality and yield drivers, typical failure modes

Practical

- Weekly plan plus troubleshooting cases

Outcomes

- Identify the main yield and quality drivers for vine crops and soft fruits in hot and dry climates

- Diagnose common crop imbalance symptoms and translate them into practical steering actions
- Build a simple weekly crop strategy that links climate, rootzone, and crop signals to daily priorities

Day 7: Cut flowers and landscape plants

Key topics

- Quality drivers, uniformity, scheduling, growth control concepts

Practical

- Translating steering logic to ornamental systems

Outcomes

- Explain the key quality drivers for cut flowers and how greenhouse decisions influence them
- Apply a steering logic to landscape plants focused on uniform growth, scheduling, and predictable output
- Define practical monitoring routines that improve uniformity and reduce quality losses

Day 8: IPM in horticulture

Key topics

- Scouting systems, thresholds, beneficial strategy, compatibility

Practical

- Scouting lab and IPM plan design

Outcomes

- Design a practical IPM program: scouting routines, thresholds, biological strategy, and intervention compatibility
- Link climate and crop management choices to pest and disease risk patterns common in arid regions
- Build an incident response playbook for outbreaks, including corrective actions and prevention steps

Day 9: Financial planning and project economics

Key topics

- Budget structure (capex buckets, opex plan, cash flow overview)
- Scenario planning: energy, yield, quality grade-out, price
- Linking horticulture decisions to financial outcomes through KPIs

Practical

- Build a simplified unit economics view and run sensitivity tests (energy, yield, grade-out, price)

Outcomes

- Explain the main drivers of greenhouse economics (yield, quality grade-out, pricing, cost structure)
- Identify biggest financial risks using sensitivity tests
- Define a KPI pack that links operational performance to financial outcomes and supports governance

Day 10: Operational excellence and performance management

Key topics

- Operating model: roles, routines, SOP discipline, handovers
- KPI rhythm: daily checks, weekly review meeting structure, action tracking

Practical

- Build a KPI dashboard and a weekly meeting agenda for your operation

Outcomes

- Define a practical operating rhythm for greenhouse management (daily checks, weekly reviews, clear ownership)
- Select and structure a KPI dashboard that highlights problems early
- Run a corrective action loop: document deviations, identify root causes, assign actions, prevent recurrence

Minor adjustments may occur based on guest speaker and visit availability.
For questions, email a.elryes@delphy.nl.

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