

TURNING OVER A CLEAN LEAF

How to protect your nursery or garden centre from pest and disease invaders

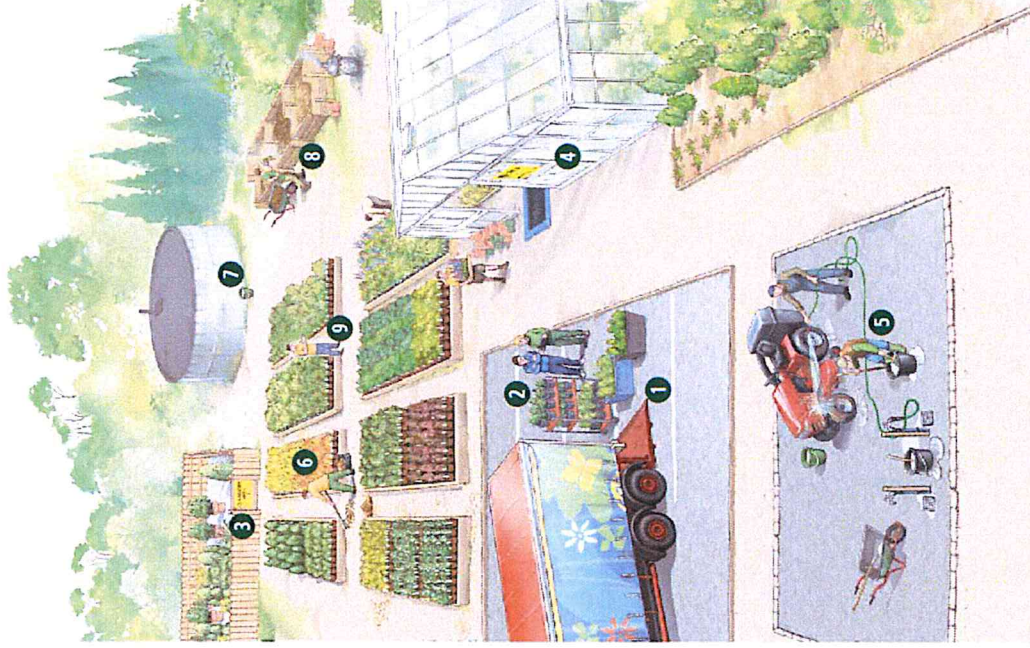
- 1 Plants coming in:** is the main method by which many pests and diseases move between premises!
 - What can you do?**
 - Source plants from suppliers with a good record of supplying disease-free stock
 - Check whether your supplier belongs to an official accreditation scheme
 - Nurseries - if possible, propagate from your own stock plants
- 2 Plants on arrival need careful inspection.**
 - Remember to:**
 - Check for compliance with purchase order and any plant passport or phytosanitary certificate required
 - Keep accurate records of all bought-in material
 - Only accept delivery if you are sure that the plants are healthy
 - If there are any problems, inform your supplier immediately
- 3 Quarantine areas** should be isolated from production and retail areas.
 - What more can you do?**
 - Restrict access to the area
 - Be scrupulous about hygiene
 - Use dedicated tools
 - Hold new arrivals for an appropriate period and monitor frequently
- 4 Clear Information** helps keep customers and visitors informed and aware. **How can this be done?**
 - Display a notice to site visitors about the risks of introducing pests or diseases
 - Clearly identify quarantine areas to prevent visitors entering
 - Increase consumer confidence by informing them of the methods used to minimise pest and disease risk
 - Consider providing information on pests and diseases, e.g. at help desks.
- 5 Day-to-day hygiene:** it's all too easy to spread pests and diseases through poor hygiene!
 - It's important to:**
 - Regularly clean and disinfect tools, machinery, clothes and boots
 - Protect hands from contamination
 - Use new pots and trays wherever possible
 - Cover items (e.g. pots, compost storage areas) that could be contaminated by plant or soil debris
 - Have regular 'clean-ups' of standing areas
 - Bag up pest or disease-affected plants before removal
 - Cover skips & other disposal areas and locate them downwind from production/retail areas
 - Practice scrupulous hygiene in propagation areas

- 6 Good plant husbandry** also matters.
 - What can you do?**
 - Avoid plant stress caused by nutrient deficiency or under/over watering
 - Handle plants with care at all times
 - Avoid prolonged leaf wetness or very high humidity:
 - o Use sub-irrigation if possible
 - o Don't overhead irrigate late in the day
 - o Ventilate greenhouses & polytunnels
 - o Space plants well
 - Protect aerial parts from soil or compost splash

- 7 Good water management** should help to prevent the spread of plant pathogens, such as *Phytophthora* species.
 - How can this be done?**
 - Recycled water should be treated before use
 - Regularly test recycled water for pathogens
 - Cover water storage tanks
 - Regularly clean and disinfect storage tanks & irrigation lines
 - Keep paths & standing areas in good order to prevent puddles forming
 - Improve drainage of soil-grown crops where waterlogging is a problem

- 8 Organic waste** can harbour pests and pathogens.
 - What should be done with it?**
 - All dead plants, prunings, etc., must be collected and disposed of safely
 - o Options for disposal include:
 - o Composting according to FERA's Code of Practice for Horticultural Waste
 - o Anaerobic digestion
 - o Landfill
 - o Burning
 - Ensure that you are fully aware of the regulations surrounding waste disposal and treatment

- 9 Regular monitoring** helps you spot problems early and take prompt remedial action. **What can you do?**
 - Use trained staff to monitor stock at regular intervals for pests and diseases
 - Get any unknown problems identified
 - Include the site boundaries (e.g. hedgerows) in the monitoring schedule
 - Notify suspect findings of quarantine pests or diseases to the relevant plant health authority.



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