



Spray pattern check for tuber treatments

For optimum product effectiveness, good even spray coverage to all tubers is essential. This should be checked whenever there is a product change, at the start of the season and at regular intervals throughout the season e.g. weekly. If any jet changes, or if other adjustments are made, a pattern check should be undertaken. A low power magnifying glass will aid droplet visibility. A visual check should be made on the spray “cone” from each jet to ensure it is even and not one-sided.

The addition of a dye to the spray solution will improve visibility. This should be checked with a paper towel, plain white paper or buff sheets (e.g. an unopened, clean sack or strips of water sensitive paper).

Roller table systems

- **ULV systems (0.1 – 0.7 l/t).**
With the rollers switched off, place a sheet of paper under the sprayer and run for sufficient time to see the deposit. Examine the distribution of the droplets and any “blobbing”.
- **LV-MV systems (0.7 – 3.0 l/t).**
Pin a sheet of paper to a board the full width of the table. With both the rollers and sprayer running, pass the board through the system. Examine the droplet distribution, evenness of droplet sizes, edge effects etc.

Conveyor systems

- Pin strips of paper around several tubers (or round wood blocks or similar) and pass them through the system whilst the sprayer and conveyors are working. Examine for distribution of droplets and their sizes. Repeat with several tubers in different positions across the conveyor.

Remedial actions

If the spray pattern is not good, check the following:

- a) are the jets, spray head and filters clean and undamaged?
- b) is the spray pressure correct?
- c) are the jets/head at the correct height and spacing?
- d) is the product dilution correct?
- e) are the correct jets fitted?

Refer to your local equipment adviser if a) to e) above does not correct the problem.

- Read the label before you buy: use pesticides safely.
- All chemicals and machinery must be used in accordance with manufacturers' recommendations.
- Follow approved Codes of Practice, such as COSHH, FEPA and NPTC*.

COSHH = Control of Substances Hazardous to Health Regulations 1989

FEPA = Food and Environment Protection Act 1985

NPTC = National Proficiency Test Council

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