## Visual assessment of droplet densities

Compare your spray samples with some known standard. The standard cards below and on the following page cover the range of acceptable droplet densities for coarse and medium LV spray. The droplet density in the target area should not be less than:

| Numbers of droplets<br>per cm <sup>2</sup> * | Type of spray                     |  |  |
|--|-----------------------------------|--|--|
| 20–30  | Insecticides                      |  |  |
| 20–30  | Herbicides pre-emergence          |  |  |
| 30–40  | Contact herbicides post-emergence |  |  |
| 50–70  | Fungicides                        |  |  |

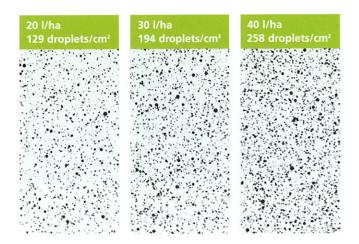
\*) 1 cm<sup>2</sup> = 0.155 sq inch 1 sq inch = 6.452 cm<sup>2</sup>

For routine checking of sprays you might also prepare your own standard cards by selecting spray cards with known droplet densities from previous spray operations.

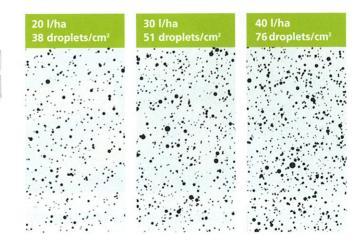
## Standard cards with a known droplet density per cm<sup>2</sup>

Computer-plotted standard cards displaying the expected number and sizes cards spraying at 3 different volume rates (20, 30, 40 l/ha) and using 3 different droplet spectra (VMD, 200, 300, 400 µm) assuming waters sprayed and the spread factor is two (see page 11).

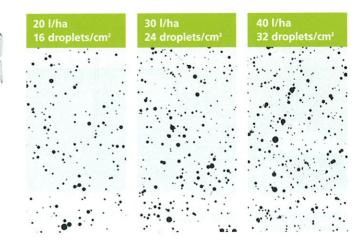
## VMD 200 µm



### VMD 300 µm



#### VMD 400 μm



# Recommended droplet density in the target area

| er                                       |  |  |  | ULV (waterless) spraying<br>Use oil-sensitive paper   |
|--|--|--|--|---|
| type of spray                            |  |  | number of droplets<br>per cm²*   | target specifications   |
| insecticides<br>herbicides pre-emergence |  |  | 20-30  | insecticides in the target area where the insects feed  |
| contact herbicides post-                 |  |  | 50 – 70  | horizontally above the canopy   |
| emergence                                |  |  | *) 1 cm² = 0.155 sq inch 1 sq inch = $6.452$ cm²                         |   |
|  | insecticides<br>herbicides pre-emergence<br>contact herbicides post- | insecticides herbicides pre-emergence contact herbicides post- emergence | insecticides herbicides pre-emergence contact herbicides post- emergence | type of spray  number of droplets per cm²*  insecticides herbicides pre-emergence contact herbicides post- emergence  50-70 |

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