During Spraying

Avoiding Drift

Spray drift can cause problems when using pesticides. It not only leads to poor control due to under-dosing, but can result in pesticides reaching water, damage sensitive crops, upset neighbours and harm the environment. Pesticide legislation requires that all spray is confined to the land, crop, structure or material that is treated. Follow the advice below and minimise the risk of spray drift, to protect crops, the public and the environment.

Before Spraying

- Listen to the local weather forecast and adjust work accordingly. Do not spray if wind speed and direction would cause drift onto sensitive areas.
- Ideal spraying conditions are a Force 2 light breeze (3.2 – 6.5 km/h) blowing away from sensitive areas. This would be a breeze strong enough to be felt on the face and to rustle leaves (see table below).
- Check each product label for spray quality recommendations and adjust your applicator and work programme accordingly. Where practical choose coarser sprays as they reduce the risk of drift.
- Check and follow statutory product label advice on “no spray zones”.
- Consider leaving a 2m unsprayed strip close to the field margin or sensitive areas (such as watercourses, ponds, gardens and wildlife conservation areas).
- Ensure that the sprayer is correctly maintained and calibrated for the job in hand.
- In the field, check wind speed and direction and if necessary amend your plans.
- Consult the BCPC booklets on “Field Scale Spraying” or “Small Scale Spraying” for further advice.

During Spraying

- Set the spray boom at the correct height and keep as low as possible without compromising the evenness of spray deposition. Check spray angles and adjust the height accordingly.
- Watch for changes in the wind speed and direction; if necessary change your spray programme to avoid drift onto non-target areas or stop spraying until suitable conditions return
- Stay alert: ensure that spray is not allowed to drift onto non-target areas.
- Maintain a constant speed and pressure, particularly if the sprayer is fitted with an automatic volume regulator: small increases in the speed result in large increases in pressure
- When using a boom sprayer, reduce the operating pressure and forward speed but keep the dose, volume and spray quality within label recommendations
- Take advantage of the latest techniques to reduce spray drift. Use low pressure, low drift, angled nozzles, rotary atomisers, twin fluid atomisers and air assisted sleeve-boom sprayers where these are appropriate to the product being applied.

More Advice

- Refer to the statutory Code of Practice for Using Plant Protection Products
- Check information supplied by your sprayer, nozzle manufacturer and HGCA
- Discuss spray quality and nozzle types with your agronomist

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Wind Speed Guide

Approx Airspeed at Boom Height	Beaufort Scale (at height of 10m)	Description	Visible Signs	Spraying
Less than 2 km/h (Less than 1.2mph)	Force 0	Calm	Smoke rises vertically	Use only medium or coarse spray quality
2-3.2 km/h (1.2-2mph)	Force 1	Light Air	Direction shown by smoke drift	Acceptable spraying conditions
3.2-6.5 km/h (2-4mph)	Force 2	Light Breeze	Leaves rustle, wind felt on face	Ideal spraying conditions
6.5-9.6 km/h (4-6mph)	Force 3	Gentle breeze	Leaves and twigs in constant motion	Increased risk of spray drift; take special care
9.6-14.5 km/h (6-9 mph)	Force 4	Moderate	Small branches moved, raises dust or loose paper	Spraying inadvisable