

Aerial application of pesticides

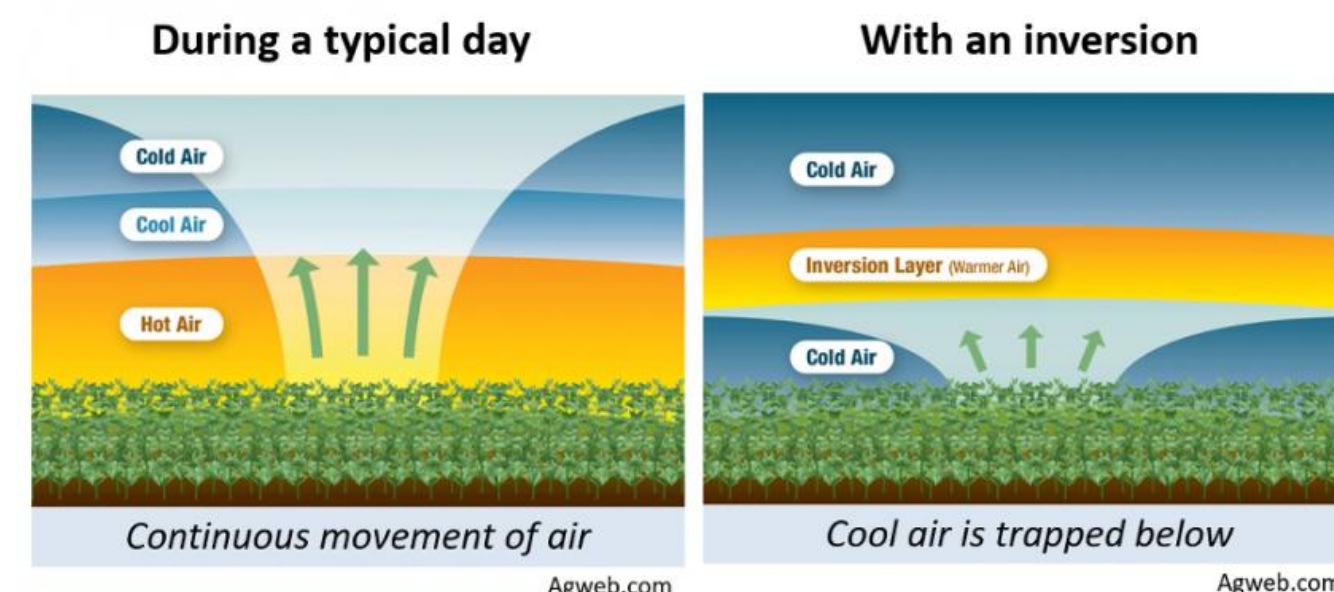
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Aerial application: Introduction and headlines

- Appropriate and advantageous in certain circumstances: rapid treatment of large and inaccessible areas; optimal timing of operations.
- But also increased risk of exposure from spray drift (to people and the environment) and intrinsic aviation hazards.
- Applicators are responsible for:
 - preventing off-target impacts
 - protecting bystanders, water bodies, wildlife and neighbouring crops

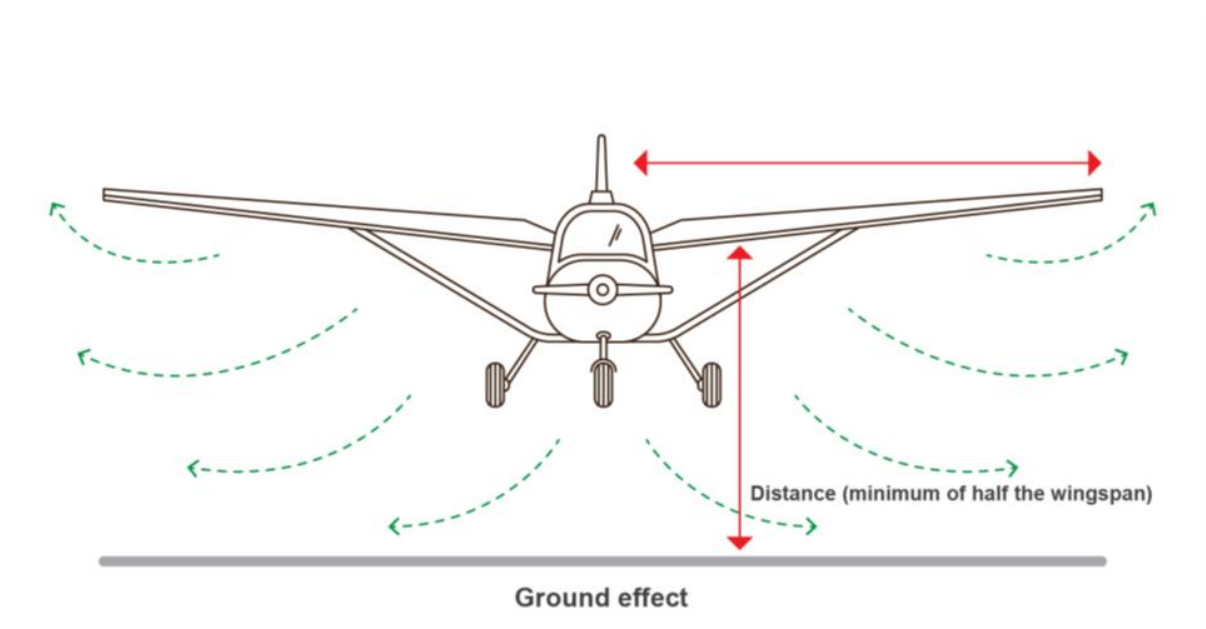
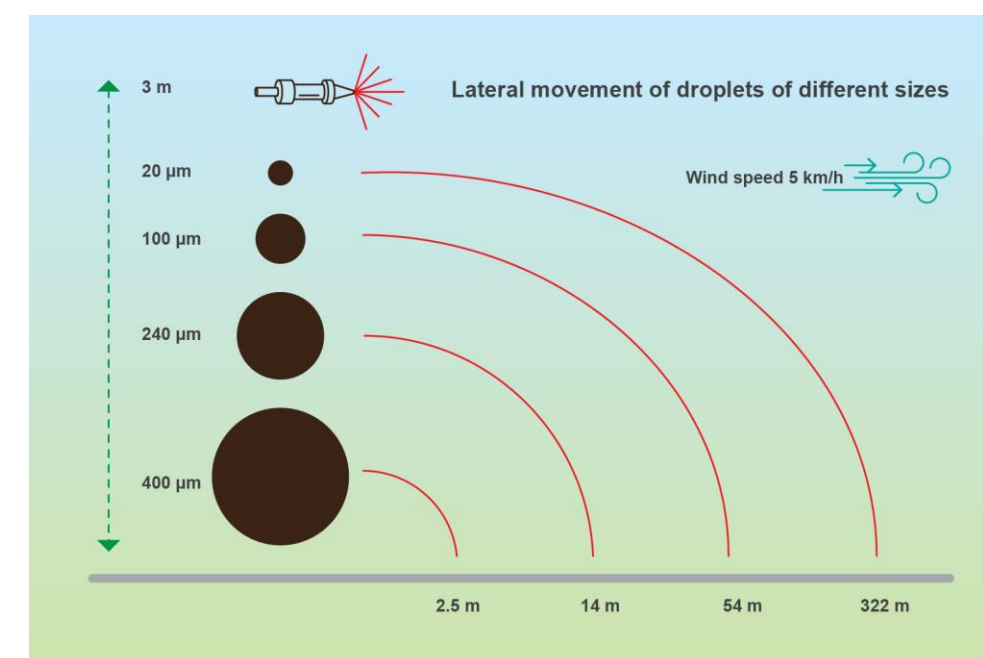
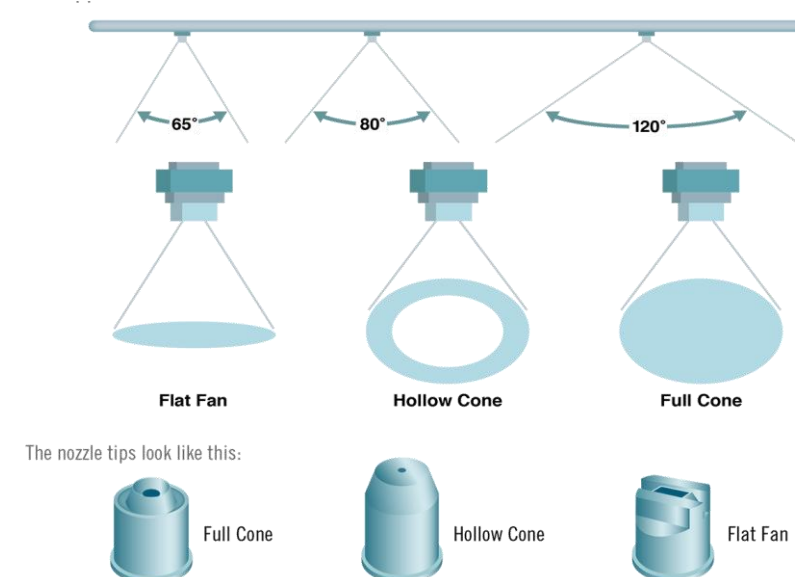
Pesticide regulation and how it works: ‘sustainable/safe’ use and the FAO guidelines on aerial application

- Risk assessment assumes product will be used in accordance with label conditions and ‘good agricultural practice’. Failure to work in this way undermines assumptions made in risk assessment process.
- What constitutes good practice? A carefully planned operation.
 - study site to identify hazards, sensitive areas, use of mitigation such as buffer zones (even if not a label requirement);
 - warn bystanders;
 - careful choice of least hazardous/most efficacious method of control (being able to adhere to any aerially-approved pesticide product label); and
 - Consider potential impact of weather (particularly inversions).



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- Risk assessment assumes product will be used in accordance with label conditions and ‘good agricultural practice’. Failure to work in this way undermines assumptions made in risk assessment process.
- What constitutes good practice? Ensure equipment performs appropriately:
 - Well-designed spray systems, well-maintained and calibrated;
 - understand how combination of nozzle choice/droplet size/placement/flow rates/impact of height above and speed across crop can deliver homogenous application to target/desired (no overlapping) swath and minimising spray drift.



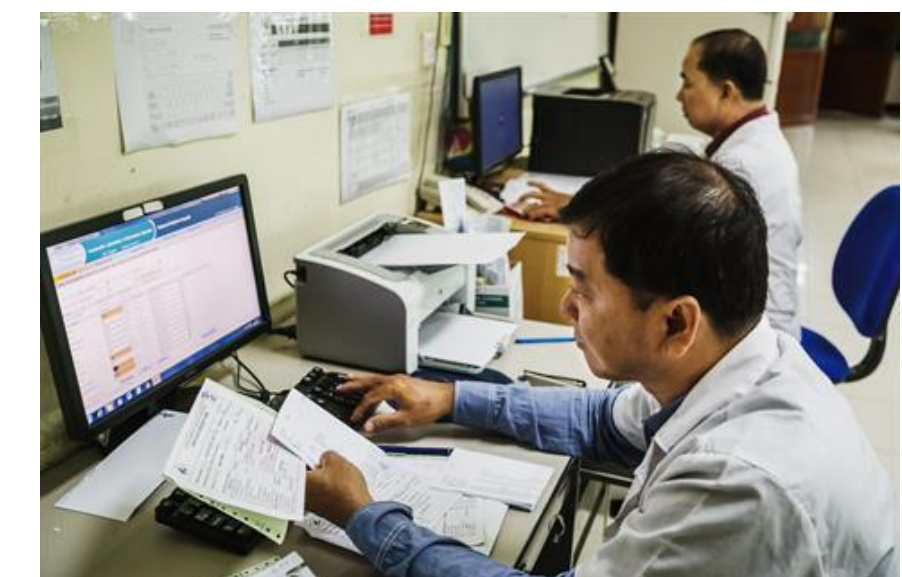
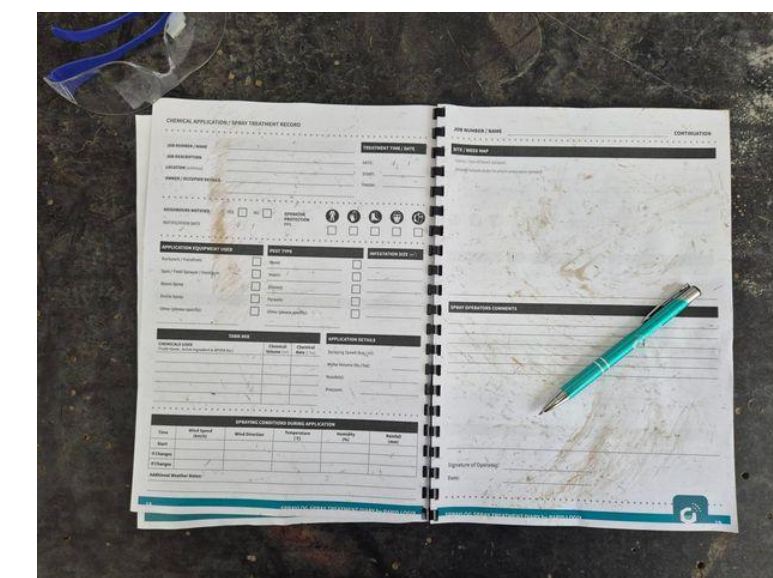
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- Risk assessment assumes product will be used in accordance with label conditions and ‘good agricultural practice’. Failure to work in this way undermines assumptions made in risk assessment process.
- What constitutes good practice? Ensure workers are protected.
 - Suitably qualified pilots/operators;
 - Use of engineering controls (closed transfer systems/pre-mixed packaging, etc) and PPE;
 - Follow specific label requirements;
 - Consider sensitizing potential of low/ULV spray mixes.



Pesticide regulation and how it works: 'sustainable/safe' use and the FAO guidelines on aerial application

- Risk assessment assumes product will be used in accordance with label conditions and 'good agricultural practice'. Failure to work in this way undermines assumptions made in risk assessment process.
- What constitutes good practice? Post treatment activity
 - appropriate cleaning and disposal of pesticides, remnants and packaging;
 - records of spray operations (equipment can help);
 - monitoring health of workers; and
 - assessing environmental impacts.



EU Controls on Aerial Application of Pesticides

- Detailed in Directive 2009/128/EC. Rationale for approach described in impact assessment prepared when legislation prepared.
- Greater risks of adverse impact of exposures from spray drift to waterbodies and bystanders.
- Recital 14 and Article 9 imposes general ban/prohibition on aerial application. But a derogation is possible if certain conditions exist/are met.
- Very limited use: France, Germany, Hungary, Spain tends to be based on topography (sloping vineyards), crop types and products (low risk).

EU Controls on Aerial Application of Pesticides: Conditions which must exist in order for aerial spraying to be carried out

- There must be no viable alternatives, or there must be clear advantages in terms of reduced impacts on human health and the environment as compared with land-based application of pesticides;
- The pesticides used must be explicitly approved for aerial spraying by the Member State following a specific assessment addressing risks from aerial spraying;
- The operator carrying out the aerial spraying must hold an official certificate demonstrating their competence in safe use.
- The enterprise responsible for providing aerial spray applications shall be certified by a competent authority for authorising equipment and aircraft for aerial application of pesticides.
- If the area to be sprayed is in close proximity to areas open to the public, specific risk management measures to ensure that there are no adverse effects on the health of bystanders shall be included in the approval. The area to be sprayed shall not be in close proximity to residential areas.

EU Controls on Aerial Application of Pesticides: Procedures to be put in place by authorities

- Designate authorities competent for: establishing the specific conditions by which aerial spraying may be carried out; examining requests for derogation; and making public information on crops, areas, circumstances and particular requirements for application including weather conditions where aerial spraying may be allowed.
- Administrative process to all users wishing to apply pesticides by aerial spraying to submit a request for approval of an application plan to the competent authority accompanied by evidence to show that the necessary conditions are fulfilled. The request for application of aerial spraying in accordance with the approved application plan must be submitted in due time to the competent authority. It shall contain information about the provisional time of spraying and the amounts and the type of pesticides applied. Authorities can operate simplified and accelerated processes in some circumstances.
- Authorities must specify in approval measures necessary for warning residents and bystanders in due time and to protect the environment in the vicinity of the area sprayed.
- Authorities must ensure that the conditions that enable the derogation to be enacted are met by conducting appropriate monitoring.
- The Authorities must keep records of the requests and approvals and shall make available to the public the relevant information contained therein such as the area to be sprayed, the provisional day and time of the spraying and the type of pesticide, in accordance with the applicable national or EU law.

Pesticide regulation and how it works: ‘sustainable/safe’ use and the FAO guidelines on aerial application: Discussion

- Does Moldova operate specific controls on the aerial application of pesticides?
- Would you take consideration of benefits into account when considering authorising aerial application?
- Are there any gaps in your knowledge or evidence available to Moldova that would prevent you from being able to confidently regulate the aerial application of pesticides?
- Where would Moldova obtain necessary advice/evidence to enable confident regulation of aerial application of pesticides?

Thank you

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