General principles for Good Management Practices

Neonicotinoids

Concerns around off-target impacts of neonicotinoid insecticides (acetamiprid, clothianidin, imidacloprid, thiacloprid, thiamethoxam) have led to public concern about their use in crops and seed treatments. It is important that as an industry, we are able to show that these, and all chemicals, are only ever handled and applied using best practice. Support your industry by adhering to best practice. If you have any concerns or queries about neonicotinoid use on any crop, contact your agrichemical representative or expert.

Handling and Storage

Read and follow all instructions on the seed label including the use of personal protective equipment when handling seed and required buffer zones.

Keep the treatment on the seed during storage and handling. Avoid storing seed under extreme temperatures and excessive humidity that may increase the breakdown of the seed treatment.

Limit Dust

Reduce insecticide dust produced at planting, keeping the treatment on the seed as much as possible. Load treated seed into planter boxes in a manner that will minimise the dust from becoming airborne. Minimise any drift of dust outside the field. If using contractors to plant seed, ensure that they have appropriate technology to minimise abrasion and dust. This could include use of deflectors or filters on the planting equipment.

Dispose of any dust left over in seed bags and filters by following any instructions on the seed bag or using a hazardous waste collection process.

Choose an appropriate lubricant. Note that talc and graphite are not permitted to be used as a seed flow lubricant for maize seed treated with these insecticides in some countries because of increased potential for dust drift; check for the latest regulations in New Zealand through your seed merchant or the EPA.govt.nz website.
Seed Dressings
Use seed treated with neonicotinoids only when there is a specific pest problem that can be effectively managed with a neonicotinoid seed treatment.

Purchase seed only from companies which follow guidelines on seed treatment – including pre and post-dressing to minimise dust creation, (and no re-coating).

Drenches and Field Sprays
For drenches and field sprays, applications should be made during low wind speeds, preferably early morning or late evening, when bees are unlikely to be foraging. For example, drench treatment of brassica and lettuce prior to transplanting or field sprays of onions and potatoes.

Avoid
Avoid planting if wind is above 15mph (24 km/hr; Beaufort wind scale 4 – a moderate breeze) when any dust will blow into the wider environment. This is particularly important if the wind is blowing toward bee hives, flowering trees or standing water sources used by bees.

Avoid any water ways and follow border guidelines.

Avoid seed-spill and clean the equipment post-drilling/planting with care to avoid environmental contamination. Dispose of any leftover treated seed properly, following directions on the seed label. Consider planting it or burying it in an appropriate place away from water bodies.

Preparation
Control flowering weeds in the field before planting so that pollinators are not attracted to in-field forage.

Inform beekeepers of timing of planting treated seed and pesticide applications so that they can protect their bees.

If in doubt, contact your local seed merchant and check for guidelines at EPA.govt.nz.

The Ministry for the Environment also has material on management of agrichemicals in New Zealand (MfE.govt.nz)