

## 4.13 - Comparing effects on honeybees and bumblebees after application of contaminated dust in semi-field and field conditions

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### Abstract

Dust drift during sowing of maize seeds treated with neonicotinoids has led to several severe honey bee poisoning incidents in the past. Studies have been conducted to assess the abrasion potential of treated seeds, the influence of different sowing machines, and the effects that dust has on honey bees in semi-field and field conditions. In the JKI a number of trials with sowing of treated seeds and assessing effects on honey bees in field and semi-field conditions and also with artificial application of small amounts of dusts under semi-field and field conditions were conducted. First data from a semi-field trial comparing the effects on mortality, foraging intensity and brood development of honey bee colonies (*Apis mellifera* L.), and colonies of the buff-tailed bumblebee (*Bombus terrestris* L.) after manual application of 1,0 and 2,0 g.ai clothianidin/ha to a flowering crop.

This study aims to assess the potential risks of neonicotinoids for honeybees, to develop and validate methods for assessing the risks from dust drift to bees and other pollinators.