# 2.2 Progress on the Osmia acute oral test - findings of the ICPPR Non-Apis subgroup solitary bee laboratory testing

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#### Abstract

The publication of the proposed EFSA risk assessment guidance document of plant protection products for pollinators highlighted that there are no study designs for non-Apis pollinators available. As a result the risk assessment of non-apis pollinators uses Apis pollinator data with so-called assessment factors to compensate for the lack of knowledge on other species. To fill part of this knowledge gap an acute oral test for solitary bees was developed within the ICPPR non-apis group.

Ringtests have been conducted in 2018 to validate and improve the suggested protocol. And in 2019 a standardized protocol has been tested by all participants once more. The tests have been performed with Osmia bicornis, Osmia cornuta, Osmia lignaria and Osmia cornifrons. A summary of the ringtest results of both years will be given and further recommendations will be presented.

## 2.3 Stingless bee ring test: acute contact toxicity test

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### **Abstract**

There is much discussion about the representativeness of Apis mellifera specie in relation to stingless bees and how protective the schemes are. Thus, since 2016 Brazil has been investing in the development of a method that can be applied to different species of stingless bees. Since 2017 Brazil has a new pesticide registration procedure, which includes the risk assessment process for bees. However, all required studies are still performed with the species Apis mellifera, since there are no standardized protocols with native Brazilian species. In order to meet the growing demand for analysis and to ensure the availability of protocols that can answer the questions regarding the representativeness of A. mellifera in relation to the biodiversity of Brazilian bees, we have developed a stingless bees protocol for possible standardization and use in the risk assessment process. The protocol was developed from adaptations to OECD 214 protocol for A. mellifera and initially tested with the species Scaptotrigona postica. During its development, the best collection method, the most suitable experimental cage and anesthesia times were established. The proposed protocol was tested using the active ingredient dimethoate between October 2018 and March 2019. The contact LD₅o were: 24h - 4.34 to 6.66 ng /  $\mu$ L; 48h - 3.08 to 5.39 ng /  $\mu$ L; 72h - 2.31 to 4.27 ng /  $\mu$ L; and 96h - 1.92 to 4.12 ng /  $\mu$ L. The method proved feasible and the protocol was presented during a workshop held in Rio Claro in January 2019 where a proposal for standardization throughout the national territory was presented. For the ring test the project has 13 laboratories: 7 universities, 3 research institutes and 3 private laboratories. Currently, the laboratories have been