Section 4 – Testing methodologies for non-Apis bees

4.1 Progress of working group Non-Apis testing

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See summary of progress of the Non-*Apis* group on page 8 Thomas Steeger: Working Groups of the ICP-PR Bee Protection Group – Developments and Progress

4.2 Summary of an ICPPR Non-Apis workshop – Subgroup higher tier (bumble bees and solitary bees) with recommendations for a semi-field experimental design

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Introduction

The publication of the proposed EFSA risk assessment guidance document of plant protection products for pollinators [1] highlighted that there are no study designs for non-Apis pollinators available. Since no official guidelines exist for semi-field testing at present, a protocol was proposed and a ringtest was conducted in 2016 to develop a general test set-up. The ringtest design was based on the draft EFSA guidance document [1], OEPP/EPPO Guideline No. 170 [2] and results of discussions regarding testing solitary bees during the meetings of the ICPPR non-Apis workgroup in 2015, 2016 and 2017 [3, 4, 5] and an hand on workshop in May 2017 [6].

Materials and Methods

Ring-tests were conducted with two different test organisms, one representative of a social bumble bee species (*Bombus terrestris* L; Hymenoptera, Apidae) and one representative of a solitary bee species (*Osmia bicornis* L; Hymenoptera, Megachilidae). Both are polylectic and foraging on a diverse spectrum of flowering crops. In addition, they are common species in Europe, commercially available and widely used for pollination services.

Several laboratories participated in the higher-tier ring test. Seven semi-field tests were conducted with *B. terrestris* and 8 semi-field tests were done with *O. bicornis* in 2016. In 2017 8 semi-field tests with bumble bees and 8 semi-field tests with solitary bees were run.

Two treatment groups were always included in the ringtest: an untreated control (water treated) and dimethoate as a toxic reference item (optional other i.e. brood affecting substances (fenoxycarb, diflubenzuron)). The toxic reference items were chosen based on their mode of action and long term experience in honey bee testing.