

serves as a model, to show, that solitary bees and their essential needs must be considered before the implementation of the measure. At this habitat the characteristic heather-bees (*Colletes succinctus* and *Andrena fuscipes*) and their cuckoo bees (*Epeolus cruciger* and *Nomada rufipes*) were present. However, the local population included only a low number of individuals, with an imbalanced host-parasite relation. Maintenance measure of heather (mowing, grazing, burning or mechanical measures like “Schopfern, Abplaggen”) interfere massively with the needs of the characteristic heather-bee species and can destroy the habitats (pollen-, nectar-resources and nesting sites) for many years. The needs of the local solitary bee population must be considerate for any maintenance measure of habitats, as this case study revealed; otherwise the local population of solitary bees might diminish.

Plant protection, pollination

Pflanzenschutz, Bestäubung

2. BICOPOLL - Targeted precision biocontrol and pollination enhancement in organic cropping systems. *Dr. Otto Boecking, Victoria Kreipe (Celle)*

Organic berry and fruit production suffers heavily from the lack of effective disease and pest management tools, and from inadequate insect pollination at times. As a consequence, the expanding demand on organic berries cannot be filled today. BICOPOLL expects to change this, and to significantly improve the yield and quality of organic fruit and berry production and thus, farm economics. We will use bees to (i) target deliver biological control agents to the flowers of the target crops to provide control of problem diseases, and to (ii) improve the pollination of organic horticultural crops. We will provide a pan-European case study on protecting organic strawberry from its most important disease, the grey mould. We will improve the efficiency of the entomovector technology via innovative research on bee management, manipulation of bee behavior, components of the cropping system, and on the plant-pathogen-vector-antagonist-system, and will investigate possibilities of expanding the use of the concept into other organic berry and fruit growing systems. This is a highly innovative approach to solving some of the most difficult disease and pest problems in organic berry and fruit production, offering solutions in areas where no solutions as yet exist.

3. An interim report of a field study of bee colonies chronically fed with 200 or 2000ppb of thiacloprid. *Reinhold Siede, Lena Faust, Christian Maus, Marina Meixner, Bernd Grünewald, Ralph Büchler (Kirchhain, Oberursel)*

Some neonicotinoides are highly toxic to honeybees. However, cyano-substituted compounds as thiacloprid are intrinsically less toxic. Laboratory assays have shown that