

## 2) The impact of rapid habitat changes in Short Rotation Coppices (SRC) on ecology of Carabid assemblages (Coleoptera: Carabidae)

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Short Rotation Coppices (SRC) are new agricultural systems where rapidly growing woods (e.g. Populus- and Salix-hybrids) are planted for energy production. In this study, we investigate the impact of habitat dynamics in the SRC on ground beetle assemblages. We hypothesised that a) species composition and dominance structure of the SRC are different from those in the adjacent arable field, b) the proportion of forest species, wingless species and spring breeders are positively correlated with the older SRC whereas that of arable field species, winged species and autumn breeders is negatively correlated. The area of investigation is situated in the sub-alpine region of Hesse, Germany. Ground beetles were caught with five pitfall traps, which were arranged in a straight line with a distance of 5 m each, at altogether 10 plots (four SRC, aged 0–3 years, a deciduous forest, an isolated forest patch, a meadow, a fallowland, a field of winter rye, and a headland). The traps are operated during the vegetation time, where the traps are changed every fortnight. In this paper, preliminary results of the first three months of the study are presented. Although, only two aspects are examined closely here, the outcomes give a hint of the confirmation of the hypotheses. In total, 73 species in 14742 individuals were caught. Most species (42) and individuals (3650) were present at the one year old SRC. The lowest number of species (8) and individuals (309) were found in the deciduous forest. Besides two species which are dominant at all the plots, the dominance of arable field species decrease in the SRC, whereas forest species are only present with low dominance values or lacking at all in the arable field and the young SRC, respectively. In tendency, the percentage of brachypterous species increases from the arable field to the oldest SRC whereas a decrease of macropterous species can be observed. The proportion of dimorphic species is ambiguous. With all precaution, we conclude that even after the relatively short standing time of three years, the SRC provide enough favourable habitat conditions for at least eurytopic forest species.

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(DPG, AK Populationsdynamik und Epidemiologie)

## 3) Monitoring of Non-Target Arthropods in Transgenic Maize Lines under Different Weed Control Regimes

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Non-target arthropod populations were monitored in both transgenic and Non-transgenic maize. A major concern regarding the deployment of insect resistant transgenic plants is their potential impact on non-target organisms, in particular on beneficial arthropods such as predators. This study aimed to evaluate the impact of maize hybrids managed with different herbicide regimes on abundance of key non-target arthropods; also to evaluate the impact of insect and weed control strategies, including insect-resistant lines and herbicide-tolerant transgenic maize hybrids, on key non-target arthropods. To assess the risks that transgenic plants pose to parasitoids and predators, various experimental treatments had been conducted. There is no significant difference between GM and non-GM maize in insect populations. Glyphosate resistance did not alter the beneficial insect populations between Bt and non-Bt maize. There are significant differences in weather conditions (temperature and rainfall) between two years; therefore the insect populations are varied. Using low or no insecticides on Bt-plants led to increase parasitoids which could keep aphids to sub-economic levels. Herbicide resistance to insect protected the transgenic maize.

(DPG, AK Populationsdynamik und Epidemiologie)

## 4) Bemerkenswerte Webspinnen (Arachnida, Araneae) und Laufkäfer (Coleoptera, Carabidae) des FFH-Gebietes „Salzstelle Wormsdorf“ (Land Sachsen-Anhalt)\*

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Natürliche Binnensalzstellen sind äußerst schutzwürdige und extrem gefährdete Biotope. Sie weisen eine sehr geringe Verbreitung auf und beherbergen eine Anzahl von Pflanzen- und Tierarten, die nach wie vor ausschließlich von naturnahen Binnensalzstellen bekannt sind. Dieser Tatbestand erhöht deren Schutzwürdigkeit und Schutzbedürftigkeit gegenüber anderen Biotoptypen. Dies verdeutlicht auch ihre Einstufung als prioritäre Lebensräume gemäß Anhang I der FFH-Richtlinie.

Das NATURA 2000-Gebiet SCI 202 „Salzstelle Wormsdorf“ befindet sich im westlichen Sachsen-Anhalt im Landkreis Börde. Es liegt im oberen Allertal in der Verwaltungsgemeinschaft Allerquelle und gehört zur Gemeinde Wormsdorf (Ortsteil der Gemeinde Eilsleben). Herausragende Bedeutung für den Naturschutz haben die Salzquellen, die sich entlang der Störungs-