durchgeführt werden, die neben den Saatzeiten auch differenzierte Herbizidaufwandmengen beinhalten.

192 - The effect of post-dispersal seed predation on weed population dynamics of *Echinochloa crus-galli* in maize monoculture

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The effect of post-dispersal seed predation on the population of the weed *Echinochloa crus-galli* (L.) P. Beauv. is examined via field experiments in minimally tilled, continuous maize fields in North-Eastern Germany. Post-dispersal seed predators, such as carabid beetles (e.g. *Harpulus rufipes*) and mice (e.g. *Apodemus sylvaticus*), feed on newly produced seeds and could, therefore, reduce weed populations by preventing seed input into the weed seedbank.
The experiment is set-up as a complete randomized block design with 6 blocks of 10.5 m x 13.5 m and 12 subplots of 1.5 m by 1.5 m. Six subplots per block are enclosed by a 1.5 m x 1.5 m and 65 cm high plastic frame to prevent access to the subplots. The potential of post-dispersal seed predators to lower weed populations is examined over the course of two years by following the fate of a single seeding of *E. crus-galli* at different densities (300, 600, 1200, 2400 seeds m^{-2}) in the subplots. The experiment is repeated on two to three fields.
Important demographic rates, namely seed mortality, seedling recruitment, seedling survival, fecundity and viability of the newly produced seeds and seed predation rate will be estimated and used to parameterize a population model of *E. crus-galli*. Experimental and modelling results will demonstrate whether post-dispersal seed predation could play a role in lowering weed populations. If so, this would proof that seed predation is an ecosystem service and worthwile to be promoted for enhancing seed predators as a tool for weed control.

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193 - Effizienz der Unkrautkontrolle in Imazamox-resistenten Winterraps (Clearfield-Technologie)

Weed Control Efficiency in Imazamox resistant Winter Oilseed Rape (Clearfield Technology)

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Seit der Markteinführung des Clearfield(CL)-Produktionssystems 2012 steht der deutschen Landwirtschaft ein neuartiges Herbizid auf der Basis des ALS-Hemmer-Herbizids Imazamox zur Verfügung. Das ausschließlich in entsprechend herbizidresistenten Winterrapssorten einsatzfähige Präparat CL-Vantiga D (Wirkstoffe: Metazachlor + Quinmerac + Imazamox) soll eine verbesserte Unkrautkontrolle gegenüber rapsspezifischen Leit- und Problemunkräutern ermöglichen. Zur Überprüfung der Wirksamkeit des CL-Systems hat der Deutsche Pflanzenschutzdienst in den Bun-