

Natural products against bird damage

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In agriculture bird feeding of seeds and seedlings causes substantial harvest and income losses. Furthermore, there are unintentional intoxications of birds if they consume toxic baits, which have been intended to be used for managing other species. Therefore, in this project a repellent shall be developed for the treatment of seeds and baits to avoid bird feeding.

In conventional agriculture chemically synthesized methiocarb is available as an effective seed treatment as protection against bird damage. However methiocarb is toxic and its use is not allowed in organic farming. In this project a repellent based on toxicologically harmless substances extracted from plants shall be found. Substances of plants will be fractioned

until their repellent compounds can be identified by HPLC.

Repellent effects will be tested by food choice experiments with corn seeds, which are treated with the plant substances and with untreated corn seeds with pigeons and pheasants in aviaries. The same method will be applied for seedlings. Best substances in the aviaries trials will be tested furthermore in field experiments.

At the end a biological repellent should be developed, which could be applied for management of bird feeding.

The project is founded by the Federal Ministry of Food, Agriculture and Consumer Protection decided by the German Bundestag.