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BPPD REVIEW

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EPA Secondary Reviewer: Gail S. Tomimatsu, Ph. D. /s/, April 22, 2003

STUDY TYPE:	Assessment of Plover Biology and Ecology, Endangered Species Assessment
MRID NO:	45739103
DP BARCODE:	D286708
CASE NO:	062458
SUBMISSION NO:	S624888
TEST MATERIAL:	*not applicable;* no testing was conducted
PROJECT NO:	IR-4 PR No. 52B
SPONSOR:	Arizona Cotton Research and Protection Council, 3721 East Wier Avenue, Phoenix, AZ 85040
TESTING FACILITY:	IR-4 Project, Technology Centre of New Jersey, Rutgers University, 681 U.S. Highway #1 South, North Brunswick, NJ 08902-3390
TITLE OF REPORT:	*Aspergillus flavus* isolate AF36 Non-target Organism and Environmental Safety Information, Amendment Number 1 to MRID 45307202
AUTHORS:	Dudley Smith, Peter Cotty, Michael Braverman, Larry Antilla
STUDY COMPLETED:	July 3, 2002
GOOD LABORATORY PRACTICE:	Not GLP Compliant
CONCLUSION:	An assessment of plover biology and ecology was provided to determine the unlikelihood of endangered plover species exposure to incremental incidences of the MPCA *A. flavus* AF36. Plovers are migratory, leave the area before the intended time of application (intended for late May or early June) of AF36 to cotton fields. Furthermore, these birds do not frequent cotton fields and feed primarily on insects and other small non-vertebrates near estuarine or freshwater shorelines, not found in agricultural lands.
CLASSIFICATION:	Supplemental

The information contained in this volume represents an assessment of plover biology seasonal occurrences, habitats, and feeding preferences in the Coastal Bend region of Texas. The assessment was based upon ornithological records and references; some records were specific for the Coastal Bend region. Moreover seasonal checklists and published records of migratory arrivals and departures were reviewed as well.

These small to medium-sized shorebirds run or walk swiftly, feed on insects, crustaceans and other small non-vertebrates and do not eat seeds. Plovers have short bills which are not adapted to cracking seeds and do not ingest seeds as part of their diet. Most accounts lists 7 to 9 plover species in North America, all are in the Charadriidae Family. The assessment summarized three plovers which may be migrating in the Coastal Bend Region.

Mountain plovers (*Eupoda montana*)overwinter in the southern U.S. and Mexico, and is typically found in dry short grass prairie and sage country. During winter migrations to Mexico, it may be found in west and far west Texas and the High Plains regions, and is only occasionally observed in the Coastal Bend Region as a migrant present in small numbers from August, through the winter, until late April. This species is not recorded as occupying Coastal Bend habitats in May, June and July. Furthermore, if present, it is most commonly found in range pastures, infested with perennial grasses and brush species and does not frequent the farming areas that are inland from the Laguna Madre and Gulf Coast barrier islands in Texas.

Piping plovers (*Charadrius melodus*) overwinter in coastal areas; they are considered a "dry sand" plover. Piping plovers occurs inland only casually, preferring pale dry sand, characteristic of dunes and high water marks from large lakes. They tend to migrate through Texas from early March to early May toward areas further south to the coastal waters of Mexico. On their way north later in the year, they are found during July to October.

Snowy plovers (*Charadrius alexandrinus*) have similar migration patterns as those of Piping plovers but may be present to some extent year round in the Texas Gulf Coast region. However their preferred habitats include upper beaches, sandy flats, areas free of vegetation and sites near the coast and barren shorelines. They are not found in inland agricultural fields.

In summary, plovers are migratory species, most pass seasonally through the region. Most species are generally absent at the time cotton blooms (late May), when AF36 is intended for application. Plovers that may migrate to the Coastal Bend region stay near beaches and coastal mud flats and do not inhabit crop land. Cotton fields are located far inland from the preferred coastal habitat and food sources of the over-wintering plovers. USDA descriptions of these soils and geographic region indicate that the land is flat and a featureless plain, a few miles from the coast, broken by a few sloping areas. Cotton is produced on nearly 600,000 acres in 10 Coastal Bend counties; Nueces and San Patricio account for 38% of the regional production.

No toxicity or other testing for adverse exposures or effects were conducted; and the assessment is largely speculative; therefore it is classified as supplemental. Several references for additional information on plovers, regional geography and intended applications of *Aspergillus flavus* AF36 (under the ECP for Texas) were cited . Also, 50 CFR Part 17 Endangered and Threatened Wildlife and Plants; Final Determinations of Critical Habitat for Wintering Piping Plovers; Final Rule (July 10, 2001) is included in the study report as supporting material.

DATA EVALUATION RECORD

ASPERGILLUS FLAVUS AF36

STUDY TYPE: Supplemental Information on Potential Toxicity to the Migratory Bird, Plover spp.

MRID 45739103

Prepared for
Biopesticides and Pollution Prevention Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
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Prepared by
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Task Order No. 03-02

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Chemical: Aspergillus flavus 36 colonized wheat seed

PC Code:
006456

HED File Code: 41300 BPPD Eco Effects
Memo Date: 4/22/2003
File ID: DPD286708
Accession #: 000-00-9002

HED Records Reference Center
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