

Peer Review Plan

Preliminary Title: The Economics of Glyphosate Resistance Management

Type of Report
(ERR, EIB, EB) ERR

Agency: Economic Research Service Influential Scientific Information
USDA Highly Influential Scientific Assessment

Agency Contact: Daniel Pick, dpick@ers.usda.gov

Subject of Review: Lower herbicide costs, lower yield losses, and higher profits provide strong economic incentives for corn producers to adopt glyphosate as their primary herbicide, particularly on herbicide-tolerant genetically engineered corn. But over time, weeds can become increasingly resistant to glyphosate. This study examines economic incentives that might contribute to the evolution of glyphosate resistance in weeds; the impacts of resistance on input use, yield, and profit; the impacts of the adoption of best management practices on input use, yield, and profit; and the aggregate costs of glyphosate resistance. Using dynamic programming models, we also examine optimal and sub-optimal herbicide decision rules and annual incentive payments designed to promote adoption of the optimal pest management strategy.

Purpose of Review: The purpose of the review is to ensure the high-quality of the economic analysis, transparent explanation of methods, objective interpretation of results, and effective communication to the intended audience.

Type of Review: Panel Review Individual Reviewers

Alternative Process (Briefly Explain):

Timing of Review (Est.): Start: 09/11/12 End: 03/11/13 Completed: 07/15/13

Number of Reviewers: 3 or fewer 4 to 10 More than 10

Primary Disciplines/Types of Expertise Needed for Review: Economists

Reviewers selected by: Agency Designated Outside Organization

Organization's Name:

Opportunities for Public Comment? Yes No

If yes, briefly state how and when these opportunities will be provided:

How:

When:

Peer Reviewers Provided with Public Comments? Yes No

Public Nominations Requested for Review Panel? Yes No

