When Aggregated Data Means Opportunity in the FIFRA/ESA Emerging Species Assessment and Consultation Process: Definition of Species Range

ABSTRACT

Since 1997, the U.S. Environmental Protection Agency (EPA) has been developing a national pesticide risk assessment program that supports its efforts to develop and implement a pesticide risk management program for the United States. This program includes a number of efforts designed to improve the efficiency and effectiveness of the pesticide risk assessment process, reduce the burden associated with pesticide assessment, and improve the quality of the risk assessment process. This program is known as the Emerging Species Assessment and Consultation (FESTF) program. The FESTF program is designed to support the development of a national system for pesticide risk assessment that is based on a comprehensive, multi-dimensional approach to risk assessment. The FESTF program includes a variety of activities, including the development of a national set of species "ranges" for species under FWS jurisdiction, which is being incorporated into FESTF's aggregated dataset. As agreed to by EPA-OPP and FWS, the species maps are being delivered on a regional basis to FWS field offices that have been and will be revising the range of the species. This exercise sets precedent on how multiple stakeholders can work together efficiently to improve data applicability, availability and cost-effectiveness.

CHALLENGES IN APPLYING SPATIAL DATA TO NATIONAL LEVEL PESTICIDE RISK ASSESSMENT

One of the challenges in implementing the NAS Panel's findings has been to review species location data as aggregated by FESTF. To address the question of species locations, EPA-OPP, FWS, NMFS, USDA and FESTF met in data review sessions, the agencies decided to develop a national set of species "ranges" for species under FWS jurisdiction. All parties agreed to a "map kit" concept whereby FESTF would prepare maps of the range of the species. This concept of using 11 crop groups for national-level assessment, mint is potentially included with other specialized pesticide uses. One northwest minor crop, mint, serves as a good illustration of this concept. The WSDA crop footprint for mint is quite limited (Figure 13). In the current EPA-OPP program crops such as wheat and field corn and a fair amount of what are big ticket center pivot crops in Washington, such as potatoes, sweet corn, and field beans. This results in a perfect marriage of federal and state data sets to capture the majority of agriculture in this state. Washington agriculture is more diverse (300+ crops) than that of most states, excluding California, which makes Washington one of the "the worse case scenarios" for achieving as much coverage as possible, which will require a cooperative effort from state partners.

LESSONS LEARNED: FESTF EXPERIENCE IN COLLECTING AND AGGREGATING DATA

FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. FESTF has learned that data collection and aggregation is a critical component of the risk assessment process. 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