## Queries to the Author

**Chapter Number: 6**

**Chapter Title:** Problem Formulation for an Assessment of Risk to Honey Bees from Applications of Plant Protection Products to Agricultural Crops

| Query | Description | Author's Response |
|---|---|---|
| **1.** | **Section:** 6.3.3 ASSESSMENT ENDPOINTS<br><br>**Author:** Please provide a specific section name for clarity than "see above" phrase in the sentence "These endpoints also fulfill the tested assessment criteria, as for the honey bee (see above)." | Replace with "(see 1,2, and 3, above)" |
| **2.** | **Section:** Reference<br><br>**Author:** Please provide the last accessed date for reference no.4 (USEPA. 1998). | This reference (USEPA. 1998) is the same that in chapter 3, it was accessed 12-15-13. |
| **3.** | **Section:** Reference<br><br>**Author:** Please provide the last accessed date for the URL in the reference no.5 (USEPA. 2012). | This reference could not be accessed, regulations.gov was down. |
| **4.** | **Section:** Reference<br><br>**Author:** Reference no.5 (USEPA. 2012) is not cited in the text. Please provide citation for the same. | Need to either look for area for USEPA 2012 refreence … or delete it from the Ref. Section |
| **5.** | **Section: 6.1 WHAT IS A PROBLEM FORMULATION?**<br><br>**Author:** Please check and confirm if "use information" is intended so in the sentence "Within the context of a pesticide active ingredient being identified as a stressor, the PF considers use information. | Replace with:<br>Within the context of a Problem Formulation for a pesticide risk assessment, the active ingredient is identified as the stressor. To better define the stressor, use information is considered such as: label information, formulations, application |

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| | | parameters (rates, methods, and timing), crop types, or information on target pests) (see Text Box below). |
| **6.** | **Section: 6.1.4 DEFINING, AND RELATION OF ASSESSMENT ENDPOINTS TO PROTECTION GOALS**<br><br>**Author:** Please check whether the heading "DEFINING, AND RELATION OF ASSESSMENT ENDPOINTS TO PROTECTION GOALS" can be changed to "DEFINITION AND RELATION OF ASSESSMENT ENDPOINTS TO PROTECTION GOALS". | Yes, heading can be changed as you suggest. |
| **7.** | **Section: 6.1.4 DEFINING, AND RELATION OF ASSESSMENT ENDPOINTS TO PROTECTION GOALS**<br><br>**Author:** Please check and confirm whether the sentence "the characteristics (attributes) of the entity that is important to protect." can be changed to "protection of the characteristics (attributes) of the entity." | No, the suggested change would not be accurate.<br>However, the phrase should be modified to read:<br>"the characteristics (attributes) of the entity that **are** important to protect. |
| **8.** | **Section: ASSESSMENT ENDPOINTS**<br><br>**Author:** Please check whether the term "(be delaing)" is given as intended in the sentence "Increased time for […] ultimately relate to fecundity." | The correct is "(*e.g.*, by delaying)" |
| **T** | **Section: Global**<br><br>**Author:** Please check if we have set all the heading levels appropriately. All heading levels are not given in the TOC.<br><br>**6.1 WHAT IS A PROBLEM FORMULATION?**<br><br>6.1.1 SELECTING ASSESSMENT ENDPOINTS<br><br>6.1.2 ECOLOGICAL RELEVANCE<br><br>6.1.3 SUSCEPTIBILITY TO KNOWN OR POTENTIAL STRESSORS | NEED to Do This in Hard Copy |

6.1.4 DEFINING, AND RELATION OF ASSESSMENT ENDPOINTS TO PROTECTION GOALS

6.1.5 CONCEPTUAL MODELS

**6.2 CASE 1: PF FOR A SYSTEMIC CHEMICAL APPLIED TO THE SOIL, OR AS A SEED-DRESSING**

6.2.1 STRESSOR DDESCRIPTION

6.2.2 PROTECTION GGOALS

6.2.3 ASSESSMENT EENDPOINTS

6.2.4 CONCEPTUAL MODEL

6.2.4.1 Risk Hypothesis

6.2.4.2 Conceptual Model Diagram

6.2.5 ANALYSIS PLAN

6.2.6 DATA NEEDS FOR EXPOSURE CHARACTERIZATION

6.2.7 DATA NEEDS FOR EFFECTS CHARACTERIZATION

6.2.8 RISK CHARACTERIZATION APPROACH

**6.3 CASE 2: PF FOR A CONTACT CHEMICAL APPLIED AS A FOLIAR SPRAY**

6.3.1 STRESSOR DDESCRIPTION

6.3.2 MANAGEMENT GOALS

6.3.3 ASSESSMENT ENDPOINTS

6.3.4 CONCEPTUAL MODEL

6.3.4.1 Risk Hypothesis

6.3.4.2 Conceptual Model Diagram

6.3.5 ANALYSIS PLAN

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| | 6.3.6 SCREENING ASSESSMENT<br><br>6.3.7 DATA NEEDS FOR REFINED EXPOSURE CHARACTERIZATION<br><br>6.3.8 DATA NEEDS FOR EFFECTS CHARACTERIZATION<br><br>6.3.9 RISK CHARACTERIZATION APPROACH<br><br>**REFERENCES** | |
| **10.** | Section: Citation<br><br>**Author:** The citation "EPA 2012" is not included in the reference list. Please check whether it should be changed to "USEPA 2012". | Yes,<br>Change to "USEPA 2012" |
| **11.** | Section: **DATA NEEDS FOR EXPOSURE CHARACTERIZATION**<br><br>**Author:** Please check and confirm whether in the sentence "These measurements can [...] nectar following and application." the part "following and application" is intended as so. Also specify whether "50%tile" and "95%tile" can be changed to "50%" and "95%." | The correct is:<br>"…expected in the pollen and nectar following **an** application"<br><br>No, 50%tile and 95%tile cannot be changed to 50% and 95%. They could be changed to 50th percentile and 95th percentile. |
| **12.** | Section:<br><br>**Author:** The abbreviation for the term "active ingredient" has been changed to "AI" instead of "a.i." Please check. | Please use "a.i." throughout the manuscript. |
| **13.** | Section: **ASSESSMENT ENDPOINTS**<br><br>**Author:** Please provide specific section name for clarity than "see above" quote in the sentence "These endpoints also fulfill the tested assessment criteria, as for the honey bee (see earlier)." | The "(see above)" refers to the points (1), (2), and (3) just 10 lines above.<br><br>As a way of clarifying, I suggest we make the language a bit tighter…. So, just before the enumeration of points (1), (2), and (3), have the text read:<br>"Colony strength appears to meet very well the **identified** criteria for an assessment endpoint." |

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| | | Then the last sentence of this section should read:<br>"These endpoints also fulfil the **identified** criteria **for an assessment endpoint, (see (1), (2) and (3) above)"** |
| **14.** | Section: **RISK CHARACTERIZATION APPROACH**<br><br>**Author:** Please provide the expansion for "EU" if deemed necessary. | "EU" is included in the Glossary, p. 342 and stands for "European Union"<br>If Wiley believes it is preferable to provide the expansion here in the chapter, the editors are ok with that. |
| **15.** | Section: References<br><br>**Author:** Please provide the last accessed date for references USEPA. 1998 and USEPA. 2012. | USEPA 1998 was accessed on 1-3-14.<br>USEPA 2012 could not be accessed. … it may be because *regulations.gov* was down. … this needs to be followed up. |
| **16.** | Section: References<br><br>**Author:** The reference (USEPA. 2012) is not cited in the text. Please provide citation for the same. | The reference "USEPA 2012" should be correctly cited in two places in this chapter.<br><br>1st in the section entitled "Data needs for Refined Exposure Characterization" under *case study #2*, on/around page 64, the sentence should read:<br>"It may be simpler to determine this using a standard EPA Tier 2 bioassay, with honey bees (i.e., toxicity of residues on foliage **(USEPA 2012)** (discussed in greater detail in Chapter 7).<br><br>2nd, in the section entitled "Data Needs for Effects Characterization" under *case study #2,* on/around page 65. The sentence should read"<br>Because the main route of exposure for forager bees … the standard EPA Tier2 bioassay with honey bees (i.e., toxicity of residues on foliage **(USEPA 2012)** may be appropriate. |