

2.02.P-We040 Protectivity Check of the Tier-1 Pesticide Risk Assessment for Aquatic Primary Producers Based on EFSA Endpoints

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Within the context of Regulation (EC) No 1107/2009 effect assessment procedures may be based on a tiered approach. In Europe, it is usually algae and/or vascular plants that determine the environmental risks in the aquatic Tier-1 effect assessment for plant protection products with an herbicidal mode of action (MoA). This tier includes tests with at least two algae and one macrophyte (*Lemna* sp.). If algae and/or vascular plants are the most sensitive group in Tier-1, higher tiers (e.g., micro/mesocosm studies) should focus on this most sensitive group. In recent years several authors compared the Regulatory Acceptable Concentrations (RACs) from Tier-1 with Tier-3 RACs from micro/mesocosm studies with algae and macrophytes to check the protectivity of Tier-1 risk assessment. These efforts resulted in different conclusions about the protectivity of Tier-1. Therefore, research was undertaken to answer the question “Is the pesticide risk assessment for plant protection products still protective after moving from the Eb/y/rC50 to ErC50?” by using the data from the Lists of Endpoints published in EFSA conclusions. For 13 herbicides and 3 fungicides with herbicidal MoA (16 in total) the check on protectiveness could be performed based on Tier-1 and Tier-3 data published by EFSA. When moving from Eb/y/rC50 to ErC50 our results show that in 68 % of the cases (11 substances) protectivity was maintained, as all these values are situated above the line 1:1. This means that in these cases EU Tier-1 is protective for Tier3. For two substances (12.5 %) a change in protectivity was observed when ErC50 was used instead of an Eb/y/rC50, as the values drop below the line 1:1. For two substances (12.5 %) both Eb/y/rC50 and ErC50 are below the line 1:1 and Tier-1 is not protective for Tier-3. For one substance (Linuron; 6.25%), no relevant EFSA risk assessment is available thus a conclusion on the protectivity cannot be drawn. When moving from Eb/y/rC50 to ErC50 in conjunction with the standard Assessment Factor of 10, protectivity changes from 81% to 68% of the cases.