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Ronilan Fish Acute Toxicity Tests

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Ecological Effects Branch does not have enough information to assess the hazard of the use of Ronilan(R) (50% WP) on strawberries to aquatic organisms. The submitted fish studies are Unacceptable because the pesticide precipitated out. These tests provide EEB insufficient dose-response information (in relation to actual amounts of pesticide in solution) to determine toxicity to fish and to evaluate the potential for chronic effects from its use on strawberries. Accurate LC_{50} values are important, for with these EEB not only will assess the acute hazards of the strawberry use to aquatic organisms but also will evaluate the potential for chronic effects. Note that with such LC_{50} values the need for chronic studies (fish life-cycle or embryo-larvae) may be precluded since EEB will be able to correlate estimated environmental concentrations with use pattern and LC_{50} information.

In order to complete its hazard assessment, EEB will need results of the following tests prior to registration: 1) fish acute LC_{50}'s (both cold- and warmwater) on the formulation (50% WP) and 2) results of a further attempt to obtain Acceptable fish acute LC_{50}'s (both cold - and warmwater) on the technical. Tests on the formulation may be adequate to determine the hazard of this product since it is formulated to keep the pesticide in suspension. The tests on the technical in which the pesticide precipitated out does not provide this information. Such tests on the 50% WP would be able to support future additional uses of the 50% WP but <u>not</u> of other formulations or the technical. Tests re-attempted on the technical, either using a different solvent such as ethylacetate or the Birge method of active suspension, may be adequate to provide information on dose-reponse and decide whether chronic tests are needed. If a proportional diluter is used, then 0- and 96-hr samples must be analyzed for active ingredient. If similar problems encountered in the previous tests occur again in this second attempt, EEB will use what does-reponse information it has and whatever safety factors it deems necessary to complete its hazard assessment of Ronilan (50% WP) on strawberries. However, if such problems occur, there will still be insufficient information to support the registration of the technical.

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