

Reviewer 1

The authors responded thoroughly and convincingly to almost all of the comments addressed to them. The additions to the manuscript clarify some details of the implementation of pesticide plant uptake in SWAT2012 and SWAT+, and explicitly state the constraints and limits related to the models' structure.

Some additional details were added to provide a clearer picture of the two catchments on which the model was tested. Following a reviewer's comment, Figure 1 was modified so that the drainage compartment is no longer visible: given the high proportion of drainage in the application catchments, this does not appear to be the best solution. This figure should be modified further (or a few sentences should be added to the text) to make the indirect influence of plant uptake on drainage fluxes clearer.

A: Thank you for the positive evaluation of our review efforts. We agree that without the tile drain, the hydrological processes are not correctly represented. We have added the tile drain back into the figure but made sure that no pesticide uptake occurs directly from the drain.

Modified Figure:

