

The ongoing journey of modelling intercropping: Key insights from the model developers and expert users on fundamental assumptions

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observed in previous multi-model comparison of monoculture systems [1,2].

 Additionally, the complexities of intercropping systems regarding light, water, and nutrient sharing concepts cannot be compared to monoculture systems.

• Most of these assumptions are rarely explicitly described in scientific publications, and sometimes they are not immediately apparent in the model documentation.

Conclusion

- Crop modelling for intercropping and mixed systems has seen significant advancements and exciting developments in recent years, outpacing progress made in past decades.
- These advancements are paving the way for designing productive, sustainable and resilient agricultural systems.
- Models vary in their core concepts, assumptions, and driving parameters, emphasizing the need for careful consideration before use.
- In the future, field data on light, water, and nutrient competition will be used to evaluate the strengths and weaknesses of these models in simulating intercropping across different environments.

