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How much nutrients could biochar-related positive priming effect provide to crops?

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From a carbon mass balance perspective, positive priming effect is usually seen as a counter balancing effect of the global change mitigation potential of biochar. However, the decomposition of the native organic matter due to the inputs of another source of carbon can be also seen as a possible source of nutrients for the crop on the short scale. The direction of priming effect reported in several recent publications, i.e. positive during the first months / years, and then negative on the longer term, indicate that this nutrient mining may be an aspect to look at when it comes to crop yield improvement effect due to biochar.

In this presentation, I will review the existing knowledge about this nutrient priming effect and try to quantify it importance.