



Organic amendment of crop soil and its relation to hotspots of bacterial nitrogen cycling

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Crop production in Australian soils requires a high use of fertilisers, including N, P and K for continues utilisation of the soil. Growers often grow crops in rotation of summer crop, such as cotton with winter crop, such as wheat in the same field. Growers are getting more and more aware about sustainability of the soil resources and the more adventurous ones use soil amendments, such as organic supplements in addition to the chemical fertilisers. We have collected soil samples from fields that were cultivated in preparation for planting cotton and tested the soil for its bacterial populations with potential to perform different functions, including those related to the nitrogen cycling. One of our aims was to determine whether organic amendments create hotspots for bacterial functions related to bacterial nitrogen cycling. This pan of the project will be discussed in this presentation.