



## **Microbial metabolic profiles in Australian soils with varying crop management strategies**

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Cotton production belt in Australia is covering vast areas from subtropical to temperate and grassland. Soil types are mostly different variations of clay with mainly black, grey and red clay soil containing variable proportions of sand in it. Growers often grow cotton in rotation with other crops, such as wheat, beans and corn, and soil fertilization vary with a number of growers using organic amendments as a main or supplementary source of nutrients. We have collected soil samples from farms in different regions and with different crop management strategies and studied the metabolic signature of microbial communities using the Biolog Ecoplate system. The metabolic patterns, supplemented with molecular analysis of the community will further the understanding of the influence of crop and soil management on soil functions carried out by microbes.