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## Waste stream raw materials as fit-for-purpose composed products in the circular economy

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Feedlot manure and FOGO (food organics, green organics) from urban services, have no current fit-for-purpose products safely useful to farmers. FOGO is contaminated with material such as glass and plastics making it dangerous for grazing animals on pasture. Both these raw materials, however, result in high-quality thermal aerobic compost from rings and windrows. The ring, closely controlled compost, is highly microbially active and is used for making compost tea, a brewed mixture of active microbes and useful plant fractions. Most waste receival stations are within metropolitan boundaries causing odour problems. The raw material is screened, mulched, and semi composted but is not fit-for-purpose because of incomplete pasturisation. In a fit-for-purpose end product, both the granting body, the EPA and

farmers are interested in the mineralisation capacity of the microbiology in the composting end-product.

### Biography

Dr. Mary Cole is an internationally recognised academic, plant pathologist and soil microbiologist for 45 years specialising in biological and regenerative agriculture farming emphasizing understanding of the role of soil biota in plant health. She demonstrates the damage synthetic chemicals have on soil and plant health. Mary founded Agpath Pty Ltd, (1980), a soil biology research company in fields of agriculture; fundamental and applied research in soils, quantitative analysis of the soil biota, fungal and microbial pathology, composting and farming consulting services. Also providing workshops national and internationally in farm management including making thermal aerobic compost and compost tea. She currently researches the organic waste stream to produce fit-for-purpose product for farmers as part of the circular economy.