AARHUS UNIVERSITY

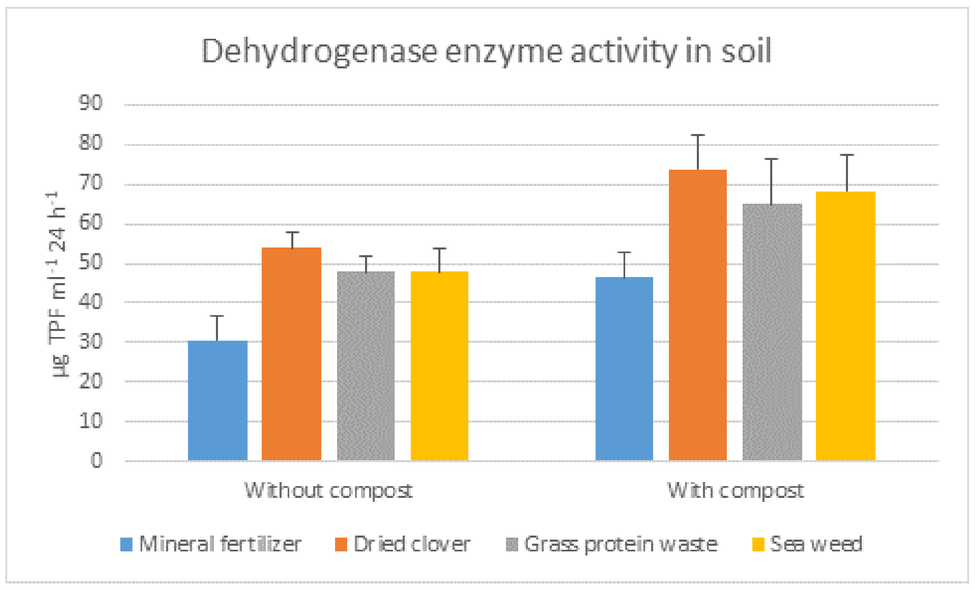
COMPOST FOR FERTILE SOILS AND HIGH QUALITY VEGETABLES

SINDHUJA SHANMUGAM, MESFIN T. GEBREMIKAEL, SANDRA GABARD, DENNIS KONNERUP & HANNE L. KRISTENSEN
DEPARTMENT OF FOOD SCIENCE, AGRO FOOD PARK 48, 8200 AARHUS N

sindhuja.shanmugam@food.au.dk

CONCEPT

Fertile soils are essential to the production of plant foods - especially to achieve high quality vegetables.
Quality compost is made by recycling of organic waste material, for example plant residues from our gardens and city parks. We need to understand how compost affect soil fertility and plant growth.
Compost is expected to stimulate soil life, improve soil structure and ability to hold water and nutrients, support plant growth and store carbon.

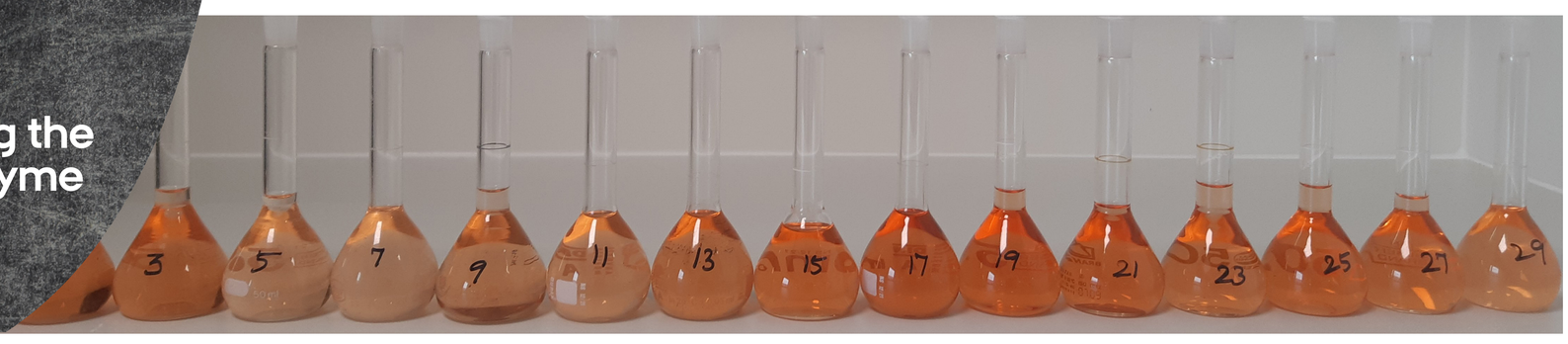


Activity of the soil enzyme dehydrogenase without and with application of compost to the soil in combination with different types of fertilisers. Dehydrogenase reflects the activity of living soil microorganisms.

Test of compost application on growth of parsley and soil fertility at Aarhus University FOOD

Parsley grown without (left) and with (right) compost, and a fertiliser of dried clover

Plant-based fertilisers provided nutrients to the parsley



Colour reactions during the analysis of the soil enzyme dehydrogenase

AARHUS UNIVERSITY
DEPARTMENT OF FOOD SCIENCE

Interreg North Sea Region SOILCOM
European Regional Development Fund
EUROPEAN UNION

Miljø- og Fødevareministeriet
gudp

ICROFS
International Centre for Research in Organic Food Systems

ClimateVeg