

Startkarakterisering af arealer til systemforskning

II. Resultater fra arealet ved Foulum

Characterization of experimental areas for cropping systems

II. Results from the Foulum area

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Resumé

Et forsøgsareal på ca. 25 ha ved Forsøgsanlæg Foulum blev grundigt karakteriseret i 1986–87 mht. fysiske, kemiske og biologiske parametre, inden forsøg med økologiske, integrerede og teknologiske dyrkningssystemer blev udlagt på arealet.

Undersøgelserne blev udført i forhold til et 40×40 m kvadratnet, og jordprøver blev udtaget

Nøgleord: Forsøgsarealer, jordvariation, jordprofiler, tekstur, volumenvægt, reel massefylde, porestørrelsesfordeling, plantetilgængelig vandmængde, aktuelt vandindhold, mættet hydraulisk ledningsevne, relativ luftdifusivitet, luftpermeabilitet, konsistensgrænser, reaktionstal, fosforsyretil, fosfortal, kaliumtal, calciumtal, magnesiumtal, natriumtal, kobbertal, kalkbehov, uorganisk fosfor, organisk fosfor, total fosfor, total kulstof, total kvælstof, mikrobiel aktivitet, mikrobiel biomasse, denitrificerende bakterier, mykorrhiza, jordboende skadedyr, regnorme, prøvedyrkning, flyfotografering.

Summary

An experimental area of 25 ha at Research Centre Foulum was characterized in 1986–87 as to physical, chemical and biological parameters before experiments with ecological, integrated and technological cropping systems were laid out on the area.

Sampling and measurements were carried out related to a square grid of 40×40 m. Soil samples were taken from following depths: 0–20 cm, 30–

40 cm and 60–70 cm. The extent of the measuring programme is apparent from the list of key words.

Alle resultater er angivet i beretningen. Resultaterne giver oplysninger om jordens udgangsposition og variabilitet. Tilsvarende undersøgelser er foretaget ved Ødum og Jyndeved. Resultater fra disse undersøgelser vil blive bragt i to efterfølgende beretninger.

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All results are given in the report. The results give information about the variability of the area and the initial values of various parameters. Corresponding characterizations have been carried out on system research areas at Ødum and at Jyndeved. The results from these areas will be published in two subsequent reports.

Key words: experimental areas, soil variation, soil profiles, texture, bulk density, particle density, pore size distribution, plant available water, actual water content, saturated hydraulic conductivity, relative air diffusivity, air permeability, consistency limits, pH, potassium, calcium, magnesium, sodium, copper, lime requirements, inorganic phosphorus, organic phosphorus, total phosphorus, organic matter, total nitrogen, microbial activity, microbial biomass, denitrifying bacteria, mykorrhiza, soil living pests, earthworms, uniformity trial, aerial photographs.

Beretningen kan fås på Statens Planteavlkontor, Skovbrynet 18, 2800 Lyngby, tlf. 45 93 09 99.

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