

Parallel workshops Monday 10.30-12.00

A. Legumes for crop production and N supply	Djäkne 1
Chair: Christine Watson	
IMPROVING N RECOVERY FROM GREEN MANURE LEYS ON CONTRASTING SOIL TYPES UNDER COLD CLIMATE CONDITIONS	Randi Frøseth
NITROGEN TRANSFER IN THREE-SPECIES MIXTURES OF GRASS, CLOVER AND FORBS	Nawa Raj Dhamala
NITROGEN SUPPLY AND DYNAMICS IN WINTER WHEAT FOLLOWING DIFFERENT GRAIN LEGUMES IN ORGANIC FARMING ROTATIONS	Hanne Schulz
BIOLOGICAL NITROGEN FIXATION AND TRANSFER IN A HIGH LATITUDE GRASS-CLOVER GRASSLAND	Vasileios Tzanakakis
B. Nitrogen in organic farming	Djäkne 2
Chair: Georg Carlsson	
STRATEGIC BIOMASS MANAGEMENT INCREASES NITROGEN FIXATION IN THE GREEN MANURE LEY OF AN ORGANIC ARABLE CROPPING SYSTEM	Tora Råberg
LARGE VARIATION IN NITROGEN EFFICIENCY AMONG ORGANIC AND NON-ORGANIC DAIRY FARMS	Sissel Hansen
SIGNIFICANCE OF LEGUME COVER CROPS IN AN ORGANIC MANAGED SOYBEAN-WINTER_WHEAT-CORN SYSTEM IN SOUTHERN ONTARIO, CANADA	Xueming Yang
SYMBIOTIC NITROGEN FIXATION AND NITROGEN FERTILIZATION VALUE OF LEGUME GREEN MANURES IN ORGANIC AGRICULTURE	Else Buenemann
C. Crop and soil sensors to predict N requirements	Djäkne 3
Chairs: Bruno Basso and Bo Stenberg	
PREDICTING GRAIN YIELD AND PROTEIN CONTENT OF WINTER BARLEY WITH AN ACTIVE OPTICAL SENSOR	Richie Hackett
POTATO CROP NITROGEN STATUS ASSESSMENT COMBINING OPTICAL INDICATORS BASED ON LEAF CHLOROPHYLL AND FLAVONOIDS CONTENTS.	Feriel Ben Abdallah
OPTIMISING N FERTILISATION WITH Yara N SENSOR	Knud Nissen

D. Nitrification and urease inhibitors		Djäkne 4
Chair: Karl Richards		
MITIGATION OF NITROUS OXIDE EMISSIONS USING A NITRIFICATION INHIBITOR, ALTERNATIVE PASTURE AND FORAGE PLANTS AND GIBBERELIC ACID		Hong Di
INHIBITION OF BACTERIAL AND FUNGAL NH ₄ -N OXIDATION BY THE NITRIFICATION INHIBITOR DICYANDIAMIDE (DCD) IN A TEMPERATE GRASSLAND SOIL		Rachael Carolan
THE EFFECT OF NITROGEN STABILISERS ON NITROUS OXIDE EMISSIONS AND SPRING BARLEY GRAIN YIELD FROM A FREE-DRAINING LOAM		Leanne Roche
COMPARISON OF THE EFFICIENCY OF NITRIFICATION INHIBITORS DMPP AND DMPSA ON A MAIZE-RYEGRASS CROP ROTATION		Sergio Menendez
E. Measures to reduce N losses		Djäkne 5
Chair: Helena Aronsson		
EFFECTS OF ORGANIC MATTER INPUT ON NUTRIENT BALANCES, NITRATE LEACHING AND CROP YIELD IN A LONG TERM EXPERIMENT ON SANDY SOILS IN THE NETHERLANDS		Janjo de Haan
EFFECTIVENESS OF NITROGEN INHIBITORS AND APPLICATION METHODS ON REDUCING AMMONIA AND NITROUS OXIDE EMISSIONS		Craig Drury
THE EFFECTIVENESS OF SOME SELECTED MANAGEMENT STRATEGIES FOR REDUCING NITROGEN LEACHING RISK FROM DAIRY GRAZING SYSTEMS IN SOUTHERN NEW ZEALAND		Ross Monaghan
CONTROLLED DRAINAGE AS MEASURE TO REDUCE NITRATE LEACHING IN DIFFERENT SOIL AND CROPPING SYSTEMS		Christen D. Børgesen
F. Nitrogen budgets and indicators for best practice N management - limits and potentials		Biskop Thurgot
Chair: Wilfried Winiwarter		
A SYSTEM N BALANCE FOR A PASTURE-BASED SYSTEM OF DAIRY PRODUCTION UNDER MOIST MARITIME CLIMATIC CONDITIONS		William Burchill
NITROGEN BUDGET ESTIMATED FOR BEEF OPERATIONS ACROSS CANADA		Shabtai Bittman
NITROGEN BALANCE AND NITROGEN FOOTPRINT OF BIOGAS CROPPING SYSTEMS: SHORT-TERM EFFECTS OF BIOGAS RESIDUE APPLICATION		Henning Kage
INDICATORS FOR NITROGEN USE EFFICIENCY BASED ON TOTAL NITROGEN FIXATION AS A COMPLEMENT TO TRADITIONAL SURPLUS-BASED INDICATORS		Rasmus Einarsson

G. Nitrogen and carbon interactions Chairs: Anke Herrmann and Thomas Kätterer	Biskop Lönnermark
LONG TERM (35 Y) EFFECTS OF MANURE AND FERTILIZER-N APPLICATION ON N BALANCE IN SOIL, CROP YIELD AND N UPTAKE EFFICIENCY	Benayahu Bar-Yosef
AGRICULTURAL MANAGEMENT AFFECTS BELOW GROUND NITROGEN AND CARBON INPUTS – A SYNTHESIS OF EIGHT YEARS ROOT RESEARCH IN SWISS LONG TERM EXPERIMENTS	Jochen Mayer
URBAN AND AGRICULTURAL WASTE APPLICATION AFFECTS NITROGEN TURNOVER, CROP UPTAKE EFFICIENCY AND SOIL FERTILITY IN LONG-TERM FIELD EXPERIMENT	Beatriz Gómez-Muñoz
PREDICTORS OF GROSS NITROGEN PROCESSES IN AGRICULTURAL SOILS: DOES QUALITY MATTER?	Anke Herrmann
H. Modeling of N ₂ O emissions Chair: Laura Cardanas	Biskop Aurelius
ESTIMATING NITROUS OXIDE FLUXES FROM AGRICULTURAL SOILS AT EUROPEAN SCALE USING A CROP GENERIC META-MODEL	Lily Paniagua
N ₂ O EMISSIONS FROM ORGANIC FERTILIZERS AND CROP RESIDUE MIXTURE IN SUGARCANE CROPPING	Vladislav Kyulavski
A NEW APPROACH TO ESTIMATE NITROUS OXIDE EMISSIONS FROM ARABLE CROPS IN THE UNITED KINGDOM?	Fiona Nicholson
NITROUS OXIDE AND NITRATE LOSSES – INFLUENCING FACTORS IN WILLOW CROPPING INVESTIGATED BY MODELLING	Åsa Kasimir