Tab. SM3 - Data fields for NitroEurope Component 2 ("manipulated sites").

Treatment details Age of the ecosystem yr Wood dry biomass (forest, shrubland, wet- land), Shout dry biomass (forest, shrubland, wet- land) Name of site, description, Workpackage number, report period text Fertiliser application (rate, incorporation details form and application method of organic text Root dry biomass (forest, shrubland, wet- land) PI name, address, phone, fax, email text Kapplied Maximum vegetation height Co N ratio of wood biomass, shoot bio- mass, root biomass, leaf biomass Site am PI details text Explicited and horbicides details (name of pesticide, added amounts of active chemic- al etc.) text Biomass Cand N Details of methods for 170 measurements text Grazing (duration, animal species, animal etc) text Biomass carbon and nitrogen yield of grain (which is removed from the field - arable) biomass carbon and nitrogen yield of grain leight of vegetation before and after each must grasslands) text Image details (e.g., loughing, stubble, wet harowing and hoeign etc.) text Image details (e.g., fire, flood etc.) which is removed from the field - arable) biomass carbon and nitrogen inesidues left after harvest (arable, grassland, which is r	g dry matter m ⁻²
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	$g(N) m^{-2} yr^{-1}$
gaint fertiliser for each application	
Depth of tillage m Age of vegetation (average) (forest, shrub- Amount of water applied during irrigation yr Solideatis Ind, wetland) Ind, wetland) Total number of soil layers included in	integer
Amount of water applied during irrigation L na ⁻¹ Addition L na ⁻¹ Instance Four instance Typical LAI during grazing (grassland) m ² m ⁻² Canopy / vegetation height m profile excluding the litter layer	0
Typical Dari daring Glassiand) In The Stame diameter breast bright and Number and States States diameter breast bright and Number and States States diameter breast bright and Number and States States diameter breast bright and States States diameter breast brea	integer
Luna management of stems per ha (forest)	
Rotation length/cropping practice text Bulk density	g soil cm ⁻³

Tab. SM3 - Data fields for NitroEurope Component 2 ("manipulated sites").

Field	Unit	Field	Unit	Field	Unit
Soil clay, sand, silt content	% by volume	Soil water concentration of dissolved or-	mg C L ⁻¹	Ecosystem NO-N flux	μg NO-N m ⁻² h ⁻¹
Stone fraction (of mineral soil)	g cm ⁻³	ganic C (DOC) from suction cups etc.		Ecosystem NO ₂ -N flux	μg NO ₂ -N m ⁻² h ⁻¹
Soil hydraulic conductivity	m h ⁻¹ MPa ⁻¹	Soil water concentration of dissolved or-	mg N L ⁻¹	Ecosystem NH ₃ -N flux	μg NH ₃ -N m ⁻² h ⁻¹
Soil porosity	% by volume	ganic N (DON) from suction cups etc.		Ecosystem CH ₄ -N flux	μg CH ₄ -C m ⁻² h ⁻¹
Moisture content at field capacity, Mois-	% by volume	NO3 leaching		Soil CO ₂ -C dark respiration	mg CO ₂ -C m ⁻² h ⁻¹
ture content at wilting point, Moisture		Seepage water	mm	- Net ecosystem CO ₂ -C exchange	mg CO ₂ -C m ⁻² h ⁻¹
content - available water		Soil NO ₃ - leaching	g N m ⁻²	Soil temperature during flux measurement	° C
Total organic C	% by weight	- Atmospheric N deposition	8	Air temperature during flux measurement	° C
Total organic N	% by weight	- Wet atmospheric nitrogen deposition	g N m ⁻² yr ⁻¹	- Chamber temperature during flux measure-	° C
рН	logarithm	- Dry atmospheric nitrogen deposition	$g N m^2 yr^{-1}$	- ment	
Soil pF		Total atmospheric nitrogen deposition	$g N m^2 yr^1$	 PPFD during flux measurement 	µmol Quanta m ⁻² s ⁻¹
Soil water content at corresponding pF	m ³ m ⁻³	· · · · · · · · · · · · · · · · · · ·	g in in yi	- Soil water during flux measurement	% by volume
pF at corresponding soil water content	logarithm	- N-fixation	0 1	_ Evapotranspiration	mm d ⁻¹
Soil Nitrogen	10 Burrenni	 Nitrogen fixation 	g N m ⁻² yr ⁻¹	– Micrometeorological parameters	
Soil nitrate concentration	µg N g ⁻¹ dry soil	 Meteorological parameters 		_ Reflected or short wave outgoing	W m ⁻²
Soil ammonium concentration	μg N g ⁻¹ dry soil	Air temperature (mean, min, max)	° C	Long wave incoming	W m ⁻²
Soil total N concentration	μg N g ⁻¹ dry soil	 Global Radiation 	W m ⁻²	Long wave outgoing	W m ⁻²
	µg Ng ury son	 Photosynthetic Photon Flux Density 	µmol Quanta m ⁻² s ⁻¹	Net radiation	W m ⁻²
Soil biomass	~ 1.4 . 14	_ Precipitation	mm	PAR incoming radiation	W m ⁻²
Microbial biomass carbon per gram of dry	mg C g ⁻¹ dry soil	Snow depth	cm	PAR outgoing radiation	W m ⁻²
soil		Throughfall (forest)	mm	Global radiation	W m ⁻²
Microbial biomass nitrogen per gram of	μg N g ⁻¹ dry soil	Depth of groundwater table	m	Air pressure	kPa
dry soil		Relative Humidity	%	Canopy radiative temperature	° C
Nitrogen cycle processes		Horizontal wind speed	m s ⁻¹	Soil heat flux 1 and 2	W m ⁻²
Net nitrogen mineralization	µg N g ⁻¹ dry soil	Atmospheric CO ₂ concentration	ppm by volume	Wind direction	0
Net nitrification	µg N g ⁻¹ dry soil	Atmospheric NH ₃ concentration	ppb by volume	Water vapour concentration	mmol H ₂ O mol ⁻¹
Net denitrification	μg N g ⁻¹ dry soil	Soil water and temperature time series		Sensible heat flux	W m ⁻²
Soil water processes		Soil water content (at least from one soil	% by volume	Latent heat flux	W m ⁻²
Soil water concentration of NO ₃ from suc-	mg N L ⁻¹	depth)		Momentum	kg m ⁻² s ⁻¹ ,
tion cups etc.	C	Soil temperature (at least from one soil	° C	Friction velocity	m s ⁻¹
Soil water concentration of NH ₄ from suc-	mg N L ⁻¹	depth)		CO ₂ storage in canopy air layer	umol CO ₂ -C m ⁻² s ⁻¹
tion cups etc.	5	Ecosystem flux and associated data		Heat storage in canopy air layer	W m ⁻²
		$= \frac{1}{\text{Ecosystem N}_2\text{O-N flux}}$	μg N ₂ O-N m ⁻² h ⁻¹	_	
			mo 1120 It III II		