1 Nutrient

Properties (Outputs)

Name	Description	Units	Type	Settable?
Catm	Total C lost to the atmosphere	kg/ha	double	False
DenitrifiedN	Denitrified Nitrogen (N flow from NO3).	kg/ha	double	False
DirectedGraphInfo	Get directed graph from model		DirectedGraph	True
FOM	The fresh organic matter pool.		INutrientPool	False
FOMCarbohydrate	The fresh organic matter carbohydrate pool.		INutrientPool	True
FOMCellulose	The fresh organic matter cellulose pool.		INutrientPool	True
FOMLignin	The fresh organic matter lignin pool.		INutrientPool	True
Humic	The humic pool.		INutrientPool	True
HydrolysedN	Urea converted to NH4 via hydrolysis.	kg/ha	double	False
Inert	The inert pool.		INutrientPool	True
Microbial	The microbial pool.		INutrientPool	True
MineralisedN	Total Net N Mineralisation in each soil layer	kg/ha	double	False
MineralisedNSurfaceResidue	Net N Mineralisation from surface residue		double	False
MineralN	Total Mineral N in each soil layer	kg/ha	double	False
N2Oatm	Total N2O lost to the atmosphere	kg/ha	double	False

Name	Description	Units	Type	Settable?
Natm	Total N lost to the atmosphere	kg/ha	double	False
NH4	The NH4 pool.		ISolute	True
NitrifiedN	Nitrified Nitrogen (from NH4 to either NO3 or N2O).	kg/ha	double	False
NO3	The NO3 pool.		ISolute	True
Organic	Soil organic nitrogen (FOM + Microbial + Humic)		INutrientPool	False
SurfaceResidue	The fresh organic matter surface residue pool.		INutrientPool	True
TotalC	Total C in each soil layer	kg/ha	double	False
TotalN	Total N in each soil layer	kg/ha	double	False
Urea	The Urea pool.		ISolute	True

Links (Dependencies)

Name	Type	IsOptional?
soilPhysical	IPhysical	False
Summary	ISummary	False
SurfaceOrganicMatter	SurfaceOrganicMatter	False

Methods (callable from manager)

Name	Description
CalculateActualSOMDecomp	SurfaceOrganicMatterDecompType CalculateActualSOMDecomp()
CalculateDirectedGraph	void CalculateDirectedGraph()
Document	ITag Document()
DoIncorpFOM	void DoIncorpFOM(FOMLayerType FOMdata) *Incorporate the given FOM C and N into each layer*

Name	Description
FOMCNR	double FOMCNR(int32 layer) *Carbon to Nitrogen Ratio for Fresh Organic Matter for a given layer*
Reset	void Reset()