Table.1: Calibrated and validated parameter values of the SWAT Landscape model

Parameter name	Description	Fitted values
$_r$CN2	Initial SCS runoff curve number for moisture condition II	(from -0.2 to -0.05)[a]
$_v$ RCHRG_DP	Deep aquifer percolation fraction	0.2
$_v$ GW_REVAP	Groundwater re-evaporation coefficient	0.18
$_v$GWQMN	Threshold depth of water in the shallow aquifer required for return flow to occur	1000
$_v$REVAPMN	Threshold depth of water in the shallow aquifer for re-evaporation or percolation to the deep aquifer to occur	500
$_v$ ALPHA_BF	Base flow factor	0.048
$_r$ SOL_AWC	Available water capacity of the soil	0.1
$_v$ SURLAG	Surface runoff lag coefficient	0.12
$_v$ ESCO	Soil evaporation compensation factor	(from 0.001 to 0.2)[a]
$_v$ EPCO	Plant uptake compensation factor	(from 0.1 to 1)[a]
$_v$ USLE_P	USLE equation support practice factor	0.13
$_v$USLE_C	Minimum value of USLE C factor for water erosion applicable to the land cover	(from 0.038 to 0.45)[a]
$_v$ NPERCO	Nitrate percolation coefficient	0.2
$_v$ SDNCO	Denitrification threshold water content	1.1
$_v$ N_UPDIS	Nitrogen uptake distribution parameter	70
$_v$ CDN	Denitrification exponential rate coefficient	1.4
$_v$ DD[b]	Drainage density factor	7.5

[a] : The fitted values depended on the land cover type

[b:] This parameter was used only in the calibration of the grid-based SWAT Landscape model

Subscript $_v$_ indicates that the parameter value is replaced by the fitted value

Subscript $_r$_ indicates the parameter value is multiplied by (1 + the fitted value)