Symbol	Parameters	Units	References	Ru	Es	Ac	Hy	Ba	Lu
$H_{max\,(i)}$	Maximal height	m	Saugier (p.c.)	0.4	0.6	0.4	1.0	1.2	0.6
$SRL_{(i)}$	Specific root length	$m\ g^{-1}$	Sarmiento (p.c., not shown)	70	300	200	260	280	70

Biomass distribution $g^{C}_{T\,(i,j)}$

$g^{C}_{W\,(i,leaf)}$	Leaf W	$g_C\ g_C^{-1}$	Berbesi (1990) except for *Lupinus* [Fontaine (2000)]	0.08	0.39	0.17	0.27	0.25	0.17
$g^{C}_{W\,(i,stem)}$	Stem W			0.12	0.03	0.40	0.40	0.43	0.44
$g^{C}_{W\,(i,seed)}$	Seed W			0.17	0.09	0.09	0.06	0.01	0.03
$g^{C}_{W\,(i,root)}$	Root W			0.41	0.05	0.24	0.24	0.23	0.33
$g^{C}_{W\,(i,dead)}$	Dead mass W			0.22	0.44	0.10	0.03	0.08	0.03
$g^{C}_{D\,(i,leaf)}$	Leaf D	$g_C\ g_C^{-1}$	Idem	0.18	0.35	0.06	0.22	0.25	0.17
$g^{C}_{D\,(i,stem)}$	Stem D			0.01	0.03	0.32	0.37	0.43	0.44
$g^{C}_{D\,(i,seed)}$	Seed D			0.02	0.12	0.01	0.01	0.01	0.03
$g^{C}_{D\,(i,root)}$	Root D			0.53	0.06	0.31	0.25	0.23	0.33
$g^{C}_{D\,(i,dead)}$	Dead mass D			0.26	0.44	0.30	0.15	0.08	0.03

Initial biomass allocation $f^{C}_{0\,(i,j)}$

$f^{C}_{0\,(i,leaf)}$	Leaf	$g_C\ g_C^{-1}\ d^{-1}$	Martineau (results of a compartment model, not shown)	0.16	0.64	0.43	0.48	0.57	0.34
$f^{C}_{0\,(i,stem)}$	Stem			0.23	0.01	0.15	0.17	0.20	0.23
$f^{C}_{0\,(i,seed)}$	Seed			0.23	0.25	0.14	0.13	0.03	0.26
$f^{C}_{0\,(i,root)}$	Root			0.38	0.10	0.28	0.22	0.20	0.17

4.2 - Caractéristiques de la parcelle

Symbol	Parameters	Dimension	References	Value
δ	Nitrogen deposition rate	$g_N\ m^{-2}\ a^{-1}$	Sarmiento (1995)	0.4
λ	Nitrogen concentration in leached water	$g_N\ dm^{-3}$	Martineau (calibration)	0.025
ρ	Fraction of rain lost by drainage	%	Sarmiento (2000)	37.6
a_{qd}	Litter decomposition rate	$g_N\ g_N^{-1}\ d^{-1}$	Coûteaux (p.c.)	$0.7\ 10^{-3}$
β	Litter burying rate	$g_N\ g_N^{-1}\ d^{-1}$	Sarmiento et al. (2004)	$6.5\ 10^{-3}$
a_{sd}	Soil organic matter decomposition rate	$g_N\ g_N^{-1}\ d^{-1}$	Sarmiento et al. (2004)	$0.02\ 10^{-3}$
SOM_0	Initial value of soil organic matter	$g_N\ m^{-2}$	Pansu (p.c.)	600

4.3 - Conditions initiales des simulations (cas standard)

Symbol	Species	Ru	Es	Ac	Hy	Ba	Lu
$G^{C}_{r\,(i)}$	Seed rain $g_C\ m^{-2}\ a^{-1}$	2.5	0.06	0.002	0.05	0.06	0.05
$G^{C}_{d\,(i)}$	Dormant seeds $g_C\ m^{-2}$	25.0	6.0	0.2	5.0	6.0	5.0

Initial values of all other species-specific variables (B, D, L) equal to 0 (bare soil).

a^{-1}: per year; **Ac**: *Acaena elongata*; **Ba**: *Baccharis prunifolia*; **d**: day; **Es**: *Espeletia schultzii*; **g_C**: gram of carbon; **g_{DM}**: gram of dry matter; **g_N**: gram of nitrogen; **Hy**: *Hypericum laricifolium*; **Lu**: *Lupinus meridanus*; **m**: meter; **p.c.**: personal communication; **Ru**: *Rumex acetosella*; **s**: second.