Sandra Diaz

List of Publications by Year
in descending order

160 papers	42,553 citations	8181 76 h-index	7160 153 g-index
167 all docs	167 docs citations	167 times ranked	36272 citing authors

#	Article	IF	Citations
1	Consequences of changing biodiversity. Nature, 2000, 405, 234-242.	27.8	3,209
2	Global effects of land use on local terrestrial biodiversity. Nature, 2015, 520, 45-50.	27.8	2,669
3	The global spectrum of plant form and function. Nature, 2016, 529, 167-171.	27.8	2,022
4	Plant species traits are the predominant control on litter decomposition rates within biomes worldwide. Ecology Letters, 2008, 11, 1065-1071.	6.4	1,913
5	Science for managing ecosystem services: Beyond the Millennium Ecosystem Assessment. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1305-1312.	7.1	1,736
6	Assessing nature's contributions to people. Science, 2018, 359, 270-272.	12.6	1,661
7	The IPBES Conceptual Framework â€" connecting nature and people. Current Opinion in Environmental Sustainability, 2015, 14, 1-16.	6.3	1,658
8	Incorporating plant functional diversity effects in ecosystem service assessments. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20684-20689.	7.1	1,242
9	Pervasive human-driven decline of life on Earth points to the need for transformative change. Science, 2019, 366, .	12.6	1,213
10	Why protect nature? Rethinking values and the environment. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1462-1465.	7.1	1,074
11	TRY plant trait database â€" enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
12	Valuing natureâ€™s contributions to people: the IPBES approach. Current Opinion in Environmental Sustainability, 2017, 26-27, 7-16.	6.3	1,007
13	Biodiversity Loss Threatens Human Well-Being. PLoS Biology, 2006, 4, e277.	5.6	984
14	Scaling environmental change through the communityâ€level: a traitâ€based responseâ€andâ€effect framework for plants. Global Change Biology, 2008, 14, 1125-1140.	9.5	981
15	Plant trait responses to grazing ? a global synthesis. Global Change Biology, 2007, 13, 313-341.	9.5	815
16	Functional traits and the growthâ€"mortality tradeâ€off in tropical trees. Ecology, 2010, 91, 3664-3674.	3.2	788
17	Towards an assessment of multiple ecosystem processes and services via functional traits. Biodiversity and Conservation, 2010, 19, 2873-2893.	2.6	759
18	Plant functional traits and environmental filters at a regional scale. Journal of Vegetation Science, 1998, 9, 113-122.	2.2	653

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19	Global climatic drivers of leaf size. Science, 2017, 357, 917-921.	12.6	580
20	Plant functional types and ecosystem function in relation to global change. Journal of Vegetation Science, 1997, 8, 463-474.	2.2	577
21	Linking biodiversity, ecosystem services, and human well-being: three challenges for designing research for sustainability. Current Opinion in Environmental Sustainability, 2015, 14, 76-85.	6.3	559
22	Global priority areas for ecosystem restoration. Nature, 2020, 586, 724-729.	27.8	489
23	Linking the influence and dependence of people on biodiversity across scales. Nature, 2017, 546, 65-72.	27.8	474
24	Plant functional trait change across a warming tundra biome. Nature, 2018, 562, 57-62.	27.8	451
25	Leaf structure and defence control litter decomposition rate across species and life forms in regional floras on two continents. New Phytologist, 1999, 143, 191-200.	7.3	424
26	Functional traits, the phylogeny of function, and ecosystem service vulnerability. Ecology and Evolution, 2013, 3, 2958-2975.	1.9	424
27	Global patterns of leaf mechanical properties. Ecology Letters, 2011, 14, 301-312.	6.4	418
28	Global traitâ€“environment relationships of plant communities. Nature Ecology and Evolution, 2018, 2, 1906-1917.	7.8	397
29	Can grazing response of herbaceous plants be predicted from simple vegetative traits?. Journal of Applied Ecology, 2001, 38, 497-508.	4.0	390
30	GRAZING EFFECTS ON RANGELAND DIVERSITY: A SYNTHESIS OF CONTEMPORARY MODELS. , 2005, 15, 757-773.		375
31	Specific Leaf Area and Dry Matter Content Estimate Thickness in Laminar Leaves. Annals of Botany, 2005, 96, 1129-1136.	2.9	374
32	Plant functional types and ecosystem function in relation to global change. Journal of Vegetation Science, 1997, 8, 463-474.	2.2	372
33	People have shaped most of terrestrial nature for at least 12,000 years. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	370
34	A global method for calculating plant <scp>CSR</scp> ecological strategies applied across biomes worldâ€wide. Functional Ecology, 2017, 31, 444-457.	3.6	330
35	Which is a better predictor of plant traits: temperature or precipitation?. Journal of Vegetation Science, 2014, 25, 1167-1180.	2.2	323
36	Title is missing!. Plant and Soil, 2000, 218/2, 21-30.	3.7	322

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37	Worldwide evidence of a unimodal relationship between productivity and plant species richness. Science, 2015, 349, 302-305.	12.6	315
38	Quantifying the Contribution of Organisms to the Provision of Ecosystem Services. BioScience, 2009, 59, 223-235.	4.9	312
39	Plant functional diversity and carbon storage â€“ an empirical test in semiâ€arid forest ecosystems. Journal of Ecology, 2013, 101, 18-28.	4.0	273
40	Does functional trait diversity predict aboveâ€ground biomass and productivity of tropical forests? Testing three alternative hypotheses. Journal of Ecology, 2015, 103, 191-201.	4.0	265
41	Plant Functional Types: Are We Getting Any Closer to the Holy Grail?. , 2007, , 149-164.		237
42	Approaches to defining a planetary boundary for biodiversity. Global Environmental Change, 2014, 28, 289-297.	7.8	236
43	Leaf traits as indicators of resourceâ€use strategy in floras with succulent species. New Phytologist, 2002, 154, 147-157.	7.3	235
44	Set ambitious goals for biodiversity and sustainability. Science, 2020, 370, 411-413.	12.6	225
45	What Drives Accelerated Land Cover Change in Central Argentina? Synergistic Consequences of Climatic, Socioeconomic, and Technological Factors. Environmental Management, 2008, 42, 181-189.	2.7	216
46	Linking functional diversity and social actor strategies in a framework for interdisciplinary analysis of nature's benefits to society. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 895-902.	7.1	216
47	FDiversity: a software package for the integrated analysis of functional diversity. Methods in Ecology and Evolution, 2011, 2, 233-237.	5.2	210
48	A novel framework for linking functional diversity of plants with other trophic levels for the quantification of ecosystem services. Journal of Vegetation Science, 2013, 24, 942-948.	2.2	209
49	Equity and sustainability in the Anthropocene: a socialâ€“ecological systems perspective on their intertwined futures. Global Sustainability, 2018, 1, .	3.3	204
50	Plant functional traits, ecosystem structure and landâ€use history along a climatic gradient in centralâ€western Argentina. Journal of Vegetation Science, 1999, 10, 651-660.	2.2	201
51	Leaf traits and herbivore selection in the field and in cafeteria experiments. Austral Ecology, 2003, 28, 642-650.	1.5	180
52	Working with Indigenous, local and scientific knowledge in assessments of nature and natureâ€™s linkages with people. Current Opinion in Environmental Sustainability, 2020, 43, 8-20.	6.3	180
53	Biodiversity and the challenge of pluralism. Nature Sustainability, 2021, 4, 567-572.	23.7	180
54	Functional traits of alien plants across contrasting climatic and landâ€use regimes: do aliens join the locals or try harder than them?. Journal of Ecology, 2010, 98, 17-27.	4.0	179

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55	A Rosetta Stone for Natureâ€™s Benefits to People. PLoS Biology, 2015, 13, e1002040.	5.6	177
56	Mapping local and global variability in plant trait distributions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10937-E10946.	7.1	159
57	Ten facts about land systems for sustainability. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	157
58	Biodiversity in forest carbon sequestration initiatives: not just a side benefit. Current Opinion in Environmental Sustainability, 2009, 1, 55-60.	6.3	155
59	Prioritizing phylogenetic diversity captures functional diversity unreliably. Nature Communications, 2018, 9, 2888.	12.8	144
60	Levers and leverage points for pathways to sustainability. People and Nature, 2020, 2, 693-717.	3.7	141
61	<scp>BHPMF</scp> â€“ a hierarchical <scp>B</scp>ayesian approach to gapâ€filling and trait prediction for macroecology and functional biogeography. Global Ecology and Biogeography, 2015, 24, 1510-1521.	5.8	132
62	Seed size and shape are good predictors of seed persistence in soil in temperate mountain grasslands of Argentina. Seed Science Research, 1999, 9, 341-345.	1.7	127
63	Biodiversity targets after 2010. Current Opinion in Environmental Sustainability, 2010, 2, 3-8.	6.3	124
64	Filtering processes in the assembly of plant communities: Are species presence and abundance driven by the same traits?. Journal of Vegetation Science, 2007, 18, 911-920.	2.2	121
65	Working landscapes need at least 20% native habitat. Conservation Letters, 2021, 14, e12773.	5.7	116
66	Predictive systems ecology. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131452.	2.6	114
67	Towards a thesaurus of plant characteristics: an ecological contribution. Journal of Ecology, 2017, 105, 298-309.	4.0	114
68	More than the sum of its parts? Assessing litter heterogeneity effects on the decomposition of litter mixtures through leaf chemistry. Plant and Soil, 2008, 303, 151-159.	3.7	113
69	Plural valuation of nature for equity and sustainability: Insights from the Global South. Global Environmental Change, 2020, 63, 102115.	7.8	104
70	Below-ground biomass and productivity of a grazed site and a neighbouring ungrazed exclosure in a grassland in central Argentina. Austral Ecology, 2004, 29, 201-208.	1.5	102
71	Fine-root traits in the global spectrum of plant form and function. Nature, 2021, 597, 683-687.	27.8	102
72	The mycorrhizal dependence of subordinates determines the effect of arbuscular mycorrhizal fungi on plant diversity. Ecology Letters, 2003, 6, 388-391.	6.4	101

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73	Solar radiation and functional traits explain the decline of forest primary productivity along a tropical elevation gradient. Ecology Letters, 2017, 20, 730-740.	6.4	100
74	The influence of habitat structure on arthropod diversity in Argentine semi-arid Chaco forest. Journal of Vegetation Science, 1995, 6, 349-356.	2.2	97
75	The social value of biodiversity and ecosystem services from the perspectives of different social actors. Ecology and Society, 2015, 20, .	2.3	96
76	Floristic composition, biomass, and aboveground net plant production in grazed and protected sites in a mountain grassland of central Argentina. Acta Oecologica, 1998, 19, 97-105.	1.1	92
77	Plant functional types and disturbance dynamics â€“ Introduction. Journal of Vegetation Science, 1999, 10, 603-608.	2.2	89
78	Socio-Environmental Systems (SES) Research: what have we learned and how can we use this information in future research programs. Current Opinion in Environmental Sustainability, 2016, 19, 160-168.	6.3	89
79	Climatic and soil factors explain the two-dimensional spectrum of global plant trait variation. Nature Ecology and Evolution, 2022, 6, 36-50.	7.8	89
80	Community structure in montane grasslands of central Argentina in relation to land use. Journal of Vegetation Science, 1994, 5, 483-488.	2.2	87
81	A generic structure for plant trait databases. Methods in Ecology and Evolution, 2011, 2, 202-213.	5.2	78
82	Functional implications of traitâ€“environment linkages in plant communities. , 1999, , 338-362.		77
83	Forest conservation: Remember Gran Chaco. Science, 2017, 355, 465-465.	12.6	75
84	Positive interaction between invasive plants: The influence of Pyracantha angustifolia on the recruitment of native and exotic woody species. Austral Ecology, 2006, 31, 293-300.	1.5	74
85	Working with Indigenous and local knowledge (ILK) in largeâ€scale ecological assessments: Reviewing the experience of the IPBES Global Assessment. Journal of Applied Ecology, 2020, 57, 1666-1676.	4.0	67
86	Assessing the utility of conserving evolutionary history. Biological Reviews, 2019, 94, 1740-1760.	10.4	65
87	Can ecosystem properties be fully translated into service values? An economic valuation of aquatic plant services. , 2011, 21, 3083-3103.		63
88	Biodiversity and ecosystem services science for a sustainable planet: the DIVERSITAS vision for 2012â€“20. Current Opinion in Environmental Sustainability, 2012, 4, 101-105.	6.3	62
89	Use your power for good: plural valuation of nature â€“ the Oaxaca statement. Global Sustainability, 2020, 3, .	3.3	62
90	Seed bank dynamics in tallâ€tussock grasslands along an altitudinal gradient. Journal of Vegetation Science, 2003, 14, 253-258.	2.2	61

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91	Two Measurement Methods of Leaf Dry Matter Content Produce Similar Results in a Broad Range of Species. Annals of Botany, 2007, 99, 955-958.	2.9	58
92	Assessing traitâ€based scaling theory in tropical forests spanning a broad temperature gradient. Global Ecology and Biogeography, 2017, 26, 1357-1373.	5.8	57
93	Scale dependence of canopy trait distributions along a tropical forest elevation gradient. New Phytologist, 2017, 214, 973-988.	7.3	57
94	Leaf traits of African woody savanna species across climate and soil fertility gradients: evidence for conservative versus acquisitive resourceâ€use strategies. Journal of Ecology, 2016, 104, 1357-1369.	4.0	56
95	An evolutionary perspective on leaf economics: phylogenetics of leaf mass per area in vascular plants. Ecology and Evolution, 2014, 4, 2799-2811.	1.9	53
96	Shrub biomass estimation in the semiarid Chaco forest: a contribution to the quantification of an underrated carbon stock. Annals of Forest Science, 2013, 70, 515-524.	2.0	51
97	Informing trait-based ecology by assessing remotely sensed functional diversity across a broad tropical temperature gradient. Science Advances, 2019, 5, eaaw8114.	10.3	51
98	Nature's contributions to people: Weaving plural perspectives. One Earth, 2021, 4, 910-915.	6.8	51
99	Plant invasions in undisturbed ecosystems: The triggering attribute approach. Journal of Vegetation Science, 2005, 16, 723-728.	2.2	50
100	Expert perspectives on global biodiversity loss and its drivers and impacts on people. Frontiers in Ecology and the Environment, 2023, 21, 94-103.	4.0	49
101	Mycorrhizal community resilience in response to experimental plant functional type removals in a woody ecosystem. Journal of Ecology, 2009, 97, 1291-1301.	4.0	46
102	Interactions between changing climate and biodiversity: Shaping humanityâ€™s future. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 6295-6296.	7.1	46
103	Post-burning regeneration of the Chaco seasonally dry forest: germination response of dominant species to experimental heat shock. Oecologia, 2015, 177, 689-699.	2.0	45
104	The rocky path from policy-relevant science to policy implementation â€” a case study from the South American Chaco. Current Opinion in Environmental Sustainability, 2016, 19, 57-66.	6.3	43
105	Contrasting functional trait syndromes underlay woody alien success in the same ecosystem. Austral Ecology, 2013, 38, 443-451.	1.5	42
106	Edaphic patchiness influences grassland regeneration from the soil seed-bank in mountain grasslands of central Argentina. Austral Ecology, 2001, 26, 205-212.	1.5	41
107	Elevated CO 2 Responsiveness, Interactions at the Community Level and Plant Functional Types. Journal of Biogeography, 1995, 22, 289.	3.0	40
108	Large changes in carbon storage under different land-use regimes in subtropical seasonally dry forests of southern South America. Agriculture, Ecosystems and Environment, 2014, 197, 68-76.	5.3	40

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109	Knowledge coâ€production with traditional herders on cattle grazing behaviour for better management of speciesâ€rich grasslands. Journal of Applied Ecology, 2020, 57, 1677-1687.	4.0	40
110	Conservation needs to integrate knowledge across scales. Nature Ecology and Evolution, 2022, 6, 118-119.	7.8	40
111	Mycorrhizal colonization mediated by species interactions in arctic tundra. Oecologia, 2003, 137, 399-404.	2.0	35
112	Landâ€use intensification effects on functional properties in tropical plant communities. Ecological Applications, 2016, 26, 174-189.	3.8	33
113	Does hairiness matter in Harare? Resolving controversy in global comparisons of plant trait responses to ecosystem disturbance. New Phytologist, 2002, 154, 7-9.	7.3	32
114	Predicting traitâ€environment relationships for venation networks along an Andesâ€Amazon elevation gradient. Ecology, 2017, 98, 1239-1255.	3.2	31
115	Grazing and the Phenology of Flowering and Fruiting in a Montane Grassland in Argentina: A Niche Approach. Oikos, 1994, 70, 287.	2.7	28
116	Of carrots and sticks. Nature Geoscience, 2014, 7, 778-779.	12.9	28
117	Fire effects on the soil seed bank and postâ€fire resilience of a semiâ€arid shrubland in central Argentina. Austral Ecology, 2018, 43, 46-55.	1.5	27
118	Examining variation in the leaf mass per area of dominant species across two contrasting tropical gradients in light of community assembly. Ecology and Evolution, 2016, 6, 5674-5689.	1.9	26
119	Foliar resistance to simulated extreme temperature events in contrasting plant functional and chorological types. Global Change Biology, 2002, 8, 1139-1145.	9.5	24
120	Tropical forest leaves may darken in response to climate change. Nature Ecology and Evolution, 2018, 2, 1918-1924.	7.8	23
121	Covariance of Sun and Shade Leaf Traits Along a Tropical Forest Elevation Gradient. Frontiers in Plant Science, 2019, 10, 1810.	3.6	23
122	Botanical Monography in the Anthropocene. Trends in Plant Science, 2021, 26, 433-441.	8.8	23
123	Optimal strategies for sampling functional traits in speciesâ€rich forests. Functional Ecology, 2015, 29, 1325-1331.	3.6	19
124	The Influence of Taxonomy and Environment on Leaf Trait Variation Along Tropical Abiotic Gradients. Frontiers in Forests and Global Change, 2020, 3, .	2.3	19
125	Structural and defensive roles of angiosperm leaf venation network reticulation across an Andesâ€“Amazon elevation gradient. Journal of Ecology, 2018, 106, 1683-1699.	4.0	18
126	The acquisitiveâ€“conservative axis of leaf trait variation emerges even in homogeneous environments. Annals of Botany, 2022, 129, 709-722.	2.9	18

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127	Not a melting pot: Plant species aggregate in their nonâ€native range. Global Ecology and Biogeography, 2020, 29, 482-490.	5.8	16
128	Incorporating biodiversity in climate change mitigation initiatives. , 2009, , 149-166.		16
129	Post-fire resprouting capacity of seasonally dry forest species â€“ Two quantitative indices. Forest Ecology and Management, 2020, 473, 118267.	3.2	15
130	Combining ecological aspects and local knowledge for the conservation of two native mammals in the Gran Chaco. Journal of Arid Environments, 2017, 147, 54-62.	2.4	13
131	Native plant naming by high-school students of different socioeconomic status: implications for botany education. International Journal of Science Education, 2018, 40, 46-66.	1.9	13
132	Reply to: â€œGlobal conservation of phylogenetic diversity captures more than just functional diversityâ€. Nature Communications, 2019, 10, 858.	12.8	13
133	Direct and indirect effects of climate on decomposition in native ecosystems from central Argentina. Austral Ecology, 2007, 32, 749-757.	1.5	12
134	Effects of arbuscular mycorrhizal colonisation on shoot and root decomposition of different plant species and species mixtures. Soil Biology and Biochemistry, 2011, 43, 466-468.	8.8	12
135	Plant community resilience in the face of fire: experimental evidence from a semiâ€arid shrubland. Austral Ecology, 2016, 41, 501-511.	1.5	12
136	Twentieth year of the Journal of Vegetation Science: the journal for all vegetation scientists. Journal of Vegetation Science, 2009, 20, 1-2.	2.2	11
137	Where does the forest come back from? Soil and litter seed banks and the juvenile bank as sources of vegetation resilience in a semiarid Neotropical forest. Journal of Vegetation Science, 2020, 31, 1017-1027.	2.2	9
138	Rethinking individual relationships with entities of nature. People and Nature, 2022, 4, 596-611.	3.7	9
139	Analyzing individual drivers of global changes promotes inaccurate long-term policies in deforestation hotspots: The case of Gran Chaco. Biological Conservation, 2022, 269, 109536.	4.1	8
140	Palaeoâ€ecology, switches, competition/disturbance and ancient forests. Journal of Vegetation Science, 2005, 16, 1-2.	2.2	7
141	Ecosystem Function Measurement, Terrestrial Communities. , 2013, , 72-89.		7
142	Leaf mechanical resistance in plant trait databases: comparing the results of two common measurement methods. Annals of Botany, 2016, 117, 209-214.	2.9	7
143	Meta-analysis Shows That Rapid Phenotypic Change in Angiosperms in Response to Environmental Change Is Followed by Stasis. American Naturalist, 2019, 194, 840-853.	2.1	7
144	Research priorities for maintaining biodiversityâ€™s contributions to people in LatinÂAmerica. UCL Open Environment, 0, 1, .	0.0	7

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145	PhenoSpace: A Shiny application to visualize trait data in the phenotypic space of the global spectrum of plant form and function. Ecology and Evolution, 2021, 11, 1526-1534.	1.9	6
146	Response to Comment on â€œWorldwide evidence of a unimodal relationship between productivity and plant species richnessâ€. Science, 2016, 351, 457-457.	12.6	5
147	Investments' role in ecosystem degradationâ€”Response. Science, 2020, 368, 377-377.	12.6	5
148	Reply to: Restoration prioritization must be informed by marginalized people. Nature, 2022, 607, E7-E9.	27.8	5
149	A novel metaâ€analytical approach to improve systematic review of rates and patterns of microevolution. Ecology and Evolution, 2017, 7, 5821-5832.	1.9	4
150	Low resilience at the early stages of recovery of the semiâ€arid Chaco forestâ€”Evidence from a field experiment. Journal of Ecology, 2021, 109, 3246-3259.	4.0	4
151	Thermal differences between juveniles and adults increased over time in European forest trees. Journal of Ecology, 2021, 109, 3944-3957.	4.0	4
152	Improving landscapeâ€scale productivity estimates by integrating traitâ€based models and remotelyâ€sensed foliarâ€trait and canopyâ€structural data. Ecography, 2022, 2022, .	4.5	4
153	Ecosystem Function Measurement, Terrestrial Communities. , 2001, , 321-344.		3
154	Herbivory, intraspecific trait variability and back to herbivory. Oikos, 2022, 2022, .	2.7	3
155	Functional signatures, epizoochory, mapping from satellites and Editors' Award. Applied Vegetation Science, 2005, 8, 1-2.	1.9	2
156	Functional characters, texture and stress. Journal of Vegetation Science, 2008, 19, 1-2.	2.2	2
157	Does Biodiversity Matter to Terrestrial Ecosystem Processes and Services?. Global Change - the IGBP Series, 2002, , 165-167.	2.1	2
158	Imanuel Noy-Meirâ€”the Ecologist and the Man. Israel Journal of Ecology and Evolution, 2011, 57, 5-16.	0.6	1
159	Response to Vergara et al. (2015)â€”Fruiting phenology as a â€œtriggering attributeâ€•of invasion process: Do invasive species take advantage of seed dispersal service provided by native birds?. Biological Invasions, 2016, 18, 2773-2774.	2.4	1
160	Land-use intensification effects on functional properties in tropical plant communities. , 2015, , 150521083605001.		0