# Erik J Veneklaas

## List of Publications by Citations



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| 119 papers | 11,668 citations | 40 h-index | 107 g-index |
| 123 ext. papers | 13,916 ext. citations | 5.4 avg, IF | 5.73 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 119 | The worldwide leaf economics spectrum. *Nature*, **2004**, 428, 821-7 | 50.4 | 4915 |
| 118 | Root structure and functioning for efficient acquisition of phosphorus: Matching morphological and physiological traits. *Annals of Botany*, **2006**, 98, 693-713 | 4.1 | 800 |
| 117 | Plant and microbial strategies to improve the phosphorus efficiency of agriculture. *Plant and Soil*, **2011**, 349, 121-156 | 4.2 | 532 |
| 116 | Opportunities for improving phosphorus-use efficiency in crop plants. *New Phytologist*, **2012**, 195, 306-320 | 7.8 | 479 |
| 115 | TRY plant trait database - enhanced coverage and open access. *Global Change Biology*, **2020**, 26, 119-188 | 11.4 | 399 |
| 114 | Strategies and agronomic interventions to improve the phosphorus-use efficiency of farming systems. *Plant and Soil*, **2011**, 349, 89-120 | 4.2 | 262 |
| 113 | Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. *New Phytologist*, **2015**, 206, 614-36 | 9.8 | 244 |
| 112 | Chickpea and white lupin rhizosphere carboxylates vary with soil properties and enhance phosphorus uptake. *Plant and Soil*, **2003**, 248, 187-197 | 4.2 | 209 |
| 111 | Update on phosphorus nutrition in Proteaceae. Phosphorus nutrition of proteaceae in severely phosphorus-impoverished soils: are there lessons to be learned for future crops?. *Plant Physiology*, **2011**, 156, 1058-66 | 6.6 | 146 |
| 110 | Carboxylate release of wheat, canola and 11 grain legume species as affected by phosphorus status. *Plant and Soil*, **2006**, 288, 127-139 | 4.2 | 145 |
| 109 | Distribution of Carboxylates and Acid Phosphatase and Depletion of Different Phosphorus Fractions in the Rhizosphere of a Cereal and Three Grain Legumes. *Plant and Soil*, **2006**, 281, 109-120 | 4.2 | 142 |
| 108 | Phosphorus benefits of different legume crops to subsequent wheat grown in different soils of Western Australia. *Plant and Soil*, **2005**, 271, 175-187 | 4.2 | 139 |
| 107 | Carboxylate composition of root exudates does not relate consistently to a crop species' ability to use phosphorus from aluminium, iron or calcium phosphate sources. *New Phytologist*, **2007**, 173, 181-90 | 9.8 | 136 |
| 106 | Nature and nurture: the importance of seed phosphorus content. *Plant and Soil*, **2012**, 357, 1-8 | 4.2 | 129 |
| 105 | Influence of leaf dry mass per area, CO2, and irradiance on mesophyll conductance in sclerophylls. *Journal of Experimental Botany*, **2009**, 60, 2303-14 | 7 | 129 |
| 104 | Banksia species (Proteaceae) from severely phosphorus-impoverished soils exhibit extreme efficiency in the use and re-mobilization of phosphorus. *Plant, Cell and Environment*, **2007**, 30, 1557-65 | 8.4 | 115 |
| 103 | Physiological and ecological significance of biomineralization in plants. *Trends in Plant Science*, **2014**, 19, 166-74 | 13.1 | 111 |

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|---|---|---|---|
| 102 | The pattern of carboxylate exudation in Banksia grandis (Proteaceae) is affected by the form of phosphate added to the soil. *Plant and Soil*, **2002**, 238, 111-122 | 4.2 | 109 |
| 101 | Leaf water relations during summer water deficit: differential responses in turgor maintenance and variation in leaf structure among different plant communities in south-western Australia. *Plant, Cell and Environment*, **2008**, 31, 1791-802 | 8.4 | 104 |
| 100 | Short Communication: Leaf trait relationships in Australian plant species. *Functional Plant Biology*, **2004**, 31, 551-558 | 2.7 | 103 |
| 99 | Optimal allocation of leaf epidermal area for gas exchange. *New Phytologist*, **2016**, 210, 1219-28 | 9.8 | 88 |
| 98 | Low levels of ribosomal RNA partly account for the very high photosynthetic phosphorus-use efficiency of Proteaceae species. *Plant, Cell and Environment*, **2014**, 37, 1276-98 | 8.4 | 87 |
| 97 | Litterfall and nutrient fluxes in two montane tropical rain forests, Colombia. *Journal of Tropical Ecology*, **1991**, 7, 319-336 | 1.3 | 81 |
| 96 | Phosphorus uptake by grain legumes and subsequently grown wheat at different levels of residual phosphorus fertiliser. *Australian Journal of Agricultural Research*, **2005**, 56, 1041 | | 74 |
| 95 | Altered vegetation structure and composition linked to fire frequency and plant invasion in a biodiverse woodland. *Biological Conservation*, **2009**, 142, 2270-2281 | 6.2 | 70 |
| 94 | Variable tolerance of wetland tree species to combined salinity and waterlogging is related to regulation of ion uptake and production of organic solutes. *New Phytologist*, **2006**, 169, 123-33 | 9.8 | 64 |
| 93 | Does cluster-root activity benefit nutrient uptake and growth of co-existing species?. *Oecologia*, **2014**, 174, 23-31 | 2.9 | 62 |
| 92 | Using multiple trait associations to define hydraulic functional types in plant communities of south-western Australia. *Oecologia*, **2008**, 158, 385-97 | 2.9 | 62 |
| 91 | Triticum aestivum shows a greater biomass response to a supply of aluminium phosphate than Lupinus albus, despite releasing fewer carboxylates into the rhizosphere. *New Phytologist*, **2006**, 169, 515-24 | 9.8 | 62 |
| 90 | Carboxylate concentrations in the rhizosphere of lateral roots of chickpea (Cicer arietinum) increase during plant development, but are not correlated with phosphorus status of soil or plants. *New Phytologist*, **2004**, 162, 745-753 | 9.8 | 59 |
| 89 | Stomatal crypts may facilitate diffusion of CO(2) to adaxial mesophyll cells in thick sclerophylls. *Plant, Cell and Environment*, **2009**, 32, 1596-611 | 8.4 | 58 |
| 88 | Photosynthesis at an extreme end of the leaf trait spectrum: how does it relate to high leaf dry mass per area and associated structural parameters?. *Journal of Experimental Botany*, **2010**, 61, 3015-28 | 7 | 54 |
| 87 | Soil seed bank compositional change constrains biodiversity in an invaded species-rich woodland. *Biological Conservation*, **2009**, 142, 256-269 | 6.2 | 54 |
| 86 | Stomatal crypts have small effects on transpiration: a numerical model analysis. *Plant Physiology*, **2009**, 151, 2018-27 | 6.6 | 51 |
| 85 | Enhanced soil and leaf nutrient status of a Western Australian Banksia woodland community invaded by Ehrharta calycina and Pelargonium capitatum. *Plant and Soil*, **2006**, 284, 253-264 | 4.2 | 51 |

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| 84 | Morphologies and elemental compositions of calcium crystals in phyllodes and branchlets of Acacia robeorum (Leguminosae: Mimosoideae). *Annals of Botany*, **2012**, 109, 887-96 | 4.1 | 50 |
| 83 | Complementary plant nutrient-acquisition strategies promote growth of neighbour species. *Functional Ecology*, **2014**, 28, 819-828 | 5.6 | 48 |
| 82 | Tropical cyclones and the ecohydrology of Australia's recent continental-scale drought. *Geophysical Research Letters*, **2012**, 39, n/a-n/a | 4.9 | 48 |
| 81 | Relative growth rate and biomass allocation in 20 Aegilops (Poaceae) species. *New Phytologist*, **1998**, 140, 425-437 | 9.8 | 41 |
| 80 | Effects of phosphorus supply on growth, phosphate concentration and cluster-root formation in three Lupinus species. *Annals of Botany*, **2010**, 105, 365-74 | 4.1 | 40 |
| 79 | Water relations and mineral nutrition of closely related woody plant species on desert dunes and interdunes. *Australian Journal of Botany*, **2008**, 56, 27 | 1.2 | 40 |
| 78 | Seasonal patterns in water use and leaf turnover of different plant functional types in a species-rich woodland, south-western Australia. *Plant and Soil*, **2003**, 257, 295-304 | 4.2 | 40 |
| 77 | Plant phosphorus status has a limited influence on the concentration of phosphorus-mobilising carboxylates in the rhizosphere of chickpea. *Functional Plant Biology*, **2005**, 32, 153-159 | 2.7 | 40 |
| 76 | Inbreeding and outbreeding depression in Stylidium hispidum: implications for mixing seed sources for ecological restoration. *Ecology and Evolution*, **2012**, 2, 2262-73 | 2.8 | 39 |
| 75 | Relative growth rate and biomass allocation in 20 Aegilops (Poaceae) species. *New Phytologist*, **1998**, 140, 425-437 | 9.8 | 39 |
| 74 | Two sides to every leaf: water and CO transport in hypostomatous and amphistomatous leaves. *New Phytologist*, **2019**, 222, 1179-1187 | 9.8 | 37 |
| 73 | Spatial analysis of fine root distribution on a recently constructed ecosystem in a water-limited environment. *Plant and Soil*, **2011**, 344, 255-272 | 4.2 | 36 |
| 72 | Rhizosphere carboxylate concentrations of chickpea are affected by genotype and soil type. *Plant and Soil*, **2004**, 261, 1-10 | 4.2 | 35 |
| 71 | Are leaf functional traits □invariant□ with plant size and what is □invariance□ anyway?. *Functional Ecology*, **2014**, 28, 1330-1343 | 5.6 | 34 |
| 70 | Gallery forest types and their environmental correlates in a Colombian savanna landscape. *Ecography*, **2005**, 28, 236-252 | 6.5 | 33 |
| 69 | Species distribution and crown decline are associated with contrasting water relations in four common sympatric eucalypt species in southwestern Australia. *Plant and Soil*, **2013**, 364, 409-423 | 4.2 | 31 |
| 68 | Apparent Overinvestment in Leaf Venation Relaxes Leaf Morphological Constraints on Photosynthesis in Arid Habitats. *Plant Physiology*, **2016**, 172, 2286-2299 | 6.6 | 27 |
| 67 | Does phenotypic plasticity in carboxylate exudation differ among rare and widespread Banksia species (Proteaceae)?. *New Phytologist*, **2007**, 173, 592-599 | 9.8 | 27 |

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| 66 | Yield and water use of wheat (Triticum aestivum) in a Mediterranean environment: Cultivar differences and sowing density effects. *Plant and Soil*, **1996**, 181, 251-262 | 4.2 | 26 |
| 65 | Root Architecture of Jarrah (Eucalyptus marginata) Trees in Relation to Post-Mining Deep Ripping in Western Australia. *Restoration Ecology*, **2007**, 15, S65-S73 | 3.1 | 25 |
| 64 | Precipitation of calcium, magnesium, strontium and barium in tissues of four Acacia species (Leguminosae: Mimosoideae). *PLoS ONE*, **2012**, 7, e41563 | 3.7 | 24 |
| 63 | Effects of global environmental change on carbon partitioning in vegetative plants of Triticum aestivum and closely related Aegilops species. *Global Change Biology*, **1995**, 1, 397-406 | 11.4 | 23 |
| 62 | Relative growth rate, biomass allocation pattern and water use efficiency of three wheat cultivars during early ontogeny as dependent on water availability. *Physiologia Plantarum*, **1996**, 98, 493-504 | 4.6 | 23 |
| 61 | Leaf manganese concentrations as a tool to assess belowground plant functioning in phosphorus-impoverished environments. *Plant and Soil*, **2021**, 461, 43-61 | 4.2 | 23 |
| 60 | Water relations and mineral nutrition of Triodia grasses on desert dunes and interdunes. *Australian Journal of Botany*, **2008**, 56, 408 | 1.2 | 22 |
| 59 | Dinitrogen-fixing Acacia species from phosphorus-impoverished soils resorb leaf phosphorus efficiently. *Plant, Cell and Environment*, **2011**, 34, 2060-70 | 8.4 | 21 |
| 58 | Tree host-pathogen interactions as influenced by drought timing: linking physiological performance, biochemical defence and disease severity. *Tree Physiology*, **2019**, 39, 6-18 | 4.2 | 20 |
| 57 | The fate of hydraulically redistributed water in a semi-arid zone eucalyptus species. *Tree Physiology*, **2011**, 31, 649-58 | 4.2 | 19 |
| 56 | Is nitrogen transfer among plants enhanced by contrasting nutrient-acquisition strategies?. *Plant, Cell and Environment*, **2015**, 38, 50-60 | 8.4 | 18 |
| 55 | Contrasting physiological responses of two co-occurring eucalypts to seasonal drought at restored bauxite mine sites. *Tree Physiology*, **2011**, 31, 1052-66 | 4.2 | 18 |
| 54 | Contrasting water relations of three coastal tree species with different exposure to salinity. *Physiologia Plantarum*, **2006**, 127, 360-373 | 4.6 | 18 |
| 53 | Dynamics of non-structural carbohydrates in two Ficus species after transfer to deep shade. *Environmental and Experimental Botany*, **2005**, 54, 148-154 | 5.9 | 18 |
| 52 | Transpiration and water relations of evergreen shrub species on an artificial landform for mine waste storage versus an adjacent natural site in semi-arid Western Australia. *Ecohydrology*, **2014**, 7, 965-981 | 2.5 | 17 |
| 51 | A climate change context for the decline of a foundation tree species in south-western Australia: insights from phylogeography and species distribution modelling. *Annals of Botany*, **2015**, 116, 941-52 | 4.1 | 16 |
| 50 | Spatio-temporal water dynamics in mature Banksia menziesii trees during drought. *Physiologia Plantarum*, **2014**, 152, 301-15 | 4.6 | 16 |
| 49 | Osmotic potential at full turgor: an easily measurable trait to help breeders select for drought tolerance in wheat. *Plant Breeding*, **2016**, 135, 279-285 | 2.4 | 16 |

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| 48 | Preferential outcrossing in Banksia ilicifolia (Proteaceae). *Australian Journal of Botany*, **2005**, 53, 163 | 1.2 | 15 |
| 47 | A Critical Evaluation of Interventions to Progress Transdisciplinary Research. *Society and Natural Resources*, **2015**, 28, 670-681 | 2.4 | 13 |
| 46 | Drying the surface soil reduces the nitrogen content of faba bean (Vicia faba L.) through a reduction in nitrogen fixation. *Plant and Soil*, **2011**, 339, 351-362 | 4.2 | 13 |
| 45 | Changes in water relations for Acacia ancistrocarpa on natural and mine-rehabilitation sites in response to an experimental wetting pulse in the Great Sandy Desert. *Plant and Soil*, **2010**, 326, 75-96 | 4.2 | 13 |
| 44 | Salinity tolerances of three succulent halophytes (Tecticornia spp.) differentially distributed along a salinity gradient. *Functional Plant Biology*, **2016**, 43, 739-750 | 2.7 | 12 |
| 43 | Links between soil texture and root architecture of Eucalyptus species may limit distribution ranges under future climates. *Plant and Soil*, **2016**, 403, 217-229 | 4.2 | 12 |
| 42 | Transpiration and plant water relations of evergreen woody vegetation on a recently constructed artificial ecosystem under seasonally dry conditions in Western Australia. *Hydrological Processes*, **2012**, 26, 3281-3292 | 3.3 | 12 |
| 41 | Isometric partitioning of hydraulic conductance between leaves and stems: balancing safety and efficiency in different growth forms and habitats. *Plant, Cell and Environment*, **2015**, 38, 1628-36 | 8.4 | 11 |
| 40 | Relative growth rate, biomass allocation pattern and water use efficiency of three wheat cultivars during early ontogeny as dependent on water availability. *Physiologia Plantarum*, **1996**, 98, 493-504 | 4.6 | 11 |
| 39 | Root-zone hypoxia reduces growth of the tropical forage grass Urochloa humidicola in high-nutrient but not low-nutrient conditions. *Annals of Botany*, **2019**, 124, 1019-1032 | 4.1 | 10 |
| 38 | Drought tolerances of three stem-succulent halophyte species of an inland semiarid salt lake system. *Functional Plant Biology*, **2014**, 41, 1230-1238 | 2.7 | 10 |
| 37 | Community patterns and environmental drivers in hyper-diverse kwongan scrub vegetation of Western Australia. *Applied Vegetation Science*, **2018**, 21, 694-722 | 3.3 | 10 |
| 36 | Hydraulic redistribution: limitations for plants in saline soils. *Plant, Cell and Environment*, **2017**, 40, 2437-2446 | 8.4 | 8 |
| 35 | Arid-zone Acacia species can access poorly soluble iron phosphate but show limited growth response. *Plant and Soil*, **2012**, 358, 119-130 | 4.2 | 8 |
| 34 | Shallow environmental gradients put inland species at risk: Insights and implications from predicting future distributions of Eucalyptus species in South Western Australia. *Austral Ecology*, **2015**, 40, 923-932 | 1.5 | 7 |
| 33 | Spatial analysis of fine root distribution on a recently constructed ecosystem in a water-limited environment. *Plant and Soil*, **2011**, 348, 471-489 | 4.2 | 7 |
| 32 | Rhizosphere processes do not explain variation in P acquisition from sparingly soluble forms among Lupinus albus accessions. *Australian Journal of Agricultural Research*, **2008**, 59, 616 | | 7 |
| 31 | Contrasting submergence tolerance in two species of stem-succulent halophytes is not determined by differences in stem internal oxygen dynamics. *Annals of Botany*, **2015**, 115, 409-18 | 4.1 | 6 |

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| 30 | A threatened ecological community: research advances and priorities for Banksia woodlands. *Australian Journal of Botany*, **2021**, 69, 53 | 1.2 | 6 |
| 29 | AusTraits, a curated plant trait database for the Australian flora. *Scientific Data*, **2021**, 8, 254 | 8.2 | 6 |
| 28 | Shallow soils negatively affect water relations and photosynthesis in two semi-arid Eucalyptus species. *Environmental and Experimental Botany*, **2018**, 155, 239-250 | 5.9 | 5 |
| 27 | Genetic delineation of local provenance defines seed collection zones along a climate gradient. *AoB PLANTS*, **2016**, 8, | 2.9 | 5 |
| 26 | The potential for phosphorus benefits through root placement in the rhizosphere of phosphorus-mobilising neighbours. *Oecologia*, **2020**, 193, 843-855 | 2.9 | 4 |
| 25 | Root positioning and trait shifts in Hibbertia racemosa as dependent on its neighbour's nutrient-acquisition strategy. *Plant, Cell and Environment*, **2021**, 44, 1257-1267 | 8.4 | 4 |
| 24 | Corrigendum to: A threatened ecological community: research advances and priorities for Banksia woodlands. *Australian Journal of Botany*, **2021**, 69, 111 | 1.2 | 4 |
| 23 | The barrier to radial oxygen loss impedes the apoplastic entry of iron into the roots of Urochloa humidicola. *Journal of Experimental Botany*, **2021**, 72, 3279-3293 | 7 | 4 |
| 22 | Individual tree growth in jarrah (Eucalyptus marginata) forest is explained by size and distance of neighbouring trees in thinned and non-thinned plots. *Forest Ecology and Management*, **2021**, 494, 119364 | 3.9 | 4 |
| 21 | Trait-based formal definition of plant functional types and functional communities in the multi-species and multi-traits context. *Ecological Complexity*, **2019**, 40, 100787 | 2.6 | 3 |
| 20 | Composition and ecological drivers of the kwongan scrub and woodlands in the northern Swan Coastal Plain, Western Australia. *Austral Ecology*, **2019**, 44, 906-916 | 1.5 | 3 |
| 19 | Root dynamics and survival in a nutrient-poor and species-rich woodland under a drying climate. *Plant and Soil*, **2018**, 424, 91-102 | 4.2 | 3 |
| 18 | Informing arid region mine-site restoration through comparative ecophysiology of Acacia species under drought. *Journal of Arid Environments*, **2016**, 133, 73-84 | 2.5 | 3 |
| 17 | Water availability drives the effectiveness of inorganic amendments to increase plant growth and substrate quality. *Catena*, **2019**, 182, 104116 | 5.8 | 3 |
| 16 | Microbial inoculation to improve plant performance in mine-waste substrates: A test using pigeon pea ( Cajanus cajan ). *Land Degradation and Development*, | 4.4 | 3 |
| 15 | Interactions among cluster-root investment, leaf phosphorus concentration, and relative growth rate in two Lupinus species. *American Journal of Botany*, **2015**, 102, 1529-37 | 2.7 | 2 |
| 14 | Spectral detection of stress-related pigments in salt-lake succulent halophytic shrubs. *International Journal of Applied Earth Observation and Geoinformation*, **2016**, 52, 457-463 | 7.3 | 2 |
| 13 | Phosphate fertiliser alters carboxylates and bacterial communities in sweet potato (Ipomoea batatas (L.) Lam.) rhizosheaths. *Plant and Soil*, **2020**, 454, 245-260 | 4.2 | 2 |

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| 12 | Root length is proxy for high-throughput screening of waterlogging tolerance in Urochloa spp. grasses. *Functional Plant Biology*, **2021**, 48, 411-421 | 2.7 | 2 |
| 11 | Investigating the effect of neighbour competition on individual tree growth in thinned and unthinned eucalypt forests. *Forest Ecology and Management*, **2021**, 499, 119637 | 3.9 | 2 |
| 10 | Population Size Effects on Progeny Performance in Banksia ilicifolia R. Br. (Proteaceae). *HAYATI Journal of Biosciences*, **2009**, 16, 43-48 | 1.2 | 1 |
| 9 | Potassium Fertilisation Is Required to Sustain Cassava Yield and Soil Fertility. *Agronomy*, **2020**, 10, 1103 | 3.6 | 1 |
| 8 | Patterns and drivers of structure, diversity, and composition in species-rich shrublands restored after mining. *Restoration Ecology*, **2021**, 29, e13360 | 3.1 | 1 |
| 7 | No evidence of regulation in root-mediated iron reduction in two Strategy I cluster-rooted Banksia species (Proteaceae). *Plant and Soil*, **2021**, 461, 203-218 | 4.2 | 1 |
| 6 | Restoration ecophysiology: an ecophysiological approach to improve restoration strategies and outcomes in severely disturbed landscapes. *Restoration Ecology*,e13571 | 3.1 | 1 |
| 5 | Stockpiling disrupts the biological integrity of topsoil for ecological restoration. *Plant and Soil*,1 | 4.2 | 0 |
| 4 | Chickpea and white lupin rhizosphere carboxylates vary with soil properties and enhance phosphorus uptake **2003**, 187-197 | | 0 |
| 3 | Native plant diversity is a stronger driver for soil quality than inorganic amendments in semi-arid post-mining rehabilitation. *Geoderma*, **2021**, 394, 115001 | 6.7 | 0 |
| 2 | How does spatial micro-environmental heterogeneity influence seedling recruitment in ironstone outcrops?. *Journal of Vegetation Science*, **2021**, 32, e13010 | 3.1 | |
| 1 | Thermal imagery of woodland tree canopies provides new insights into drought-induced tree mortality.. *Science of the Total Environment*, **2022**, 155395 | 10.2 | |