**Extra papers for Glopnet- summary of printed papers**

VICTORIAN STUDIES

1. Carr et al. 1980 Field studies of nitrogen fixation of Australian alpine plants and soils. Australian Journal of Ecology 5:211-220. N/A

* Reports N2 fixation rates of Poa australis, Sphagnum moss, Carex gaudichaudiana and Podocarpus lawrencei from the Victorian alps.

1. Feller 1980 Biomass and nutrient distribution in two eucalypt forest ecosystems. Australian Journal of Ecology 5:309-333. ADDED

-Soil data for two sites ER and EO:

ER: 0-15cm sand 58%, silt 9%, clay 33%; bulk density 0.4 g/cm3; pH (H2O): 4.7, 0.56% N, 0.044% P, 0.5% K, CEC- 42.2meq/100g soil. (Krasnozem Gn 4.31), igneous quartz-dacite bedrock for both sites.

EO: 0-25cm sand 38%, silt 24%, clay 38%; bulk density 1.2g/cm3; pH(H2O): 5.7, 0.25% N, 0.015% P, 0.6% K, CEC – 15.5meq/100g soil. (Krasnozem-podzolic intermediate Gn 4.54)

-Leaf N, P, K for 5 species Eucalyptus regnans, Acacia dealbata, Acacia obliquinervia, Eucalyptus oblique, Eucalyptus dives.

-Additional data: wood and Root %N, %P, %K and leaf and root Ca, Mg, Na.

Also Feller 1981 Catchment nutrient budgets and geological weathering in Eucalyptus regnans ecosystems in Victoria. Australian Journal of Ecology 6:65-77. Describes stream water and precipitation nutrient contents and weathering rates for 1980 study catchment.

1. Ashton 1975 Studies of litter in Eucalyptus regnans forests. Australian Journal of Botany 23:413-433. ADDED

* Included nutrient content of litter % (P, N, C, K, Ca) for 5 species; Eucalyptus regnans, Pomaderris aspera, Olearia argophylla, Acacia dealbata, Cassinia aculeata.
* Rates of leaffall measured- could determine leaf lifespan (?)
* Soil pH: 5.4 to 5.0 (different aged stands), 0.56% soil N (0-15cm) for mature stand only
* At Wallaby Creek (8-9km W of Mt Disappointment sites) (some site description in Ashton 1975: Aust. J Bot 23;239-252.)
* Retranslocation data for E. regnans added from Grove et al 1996

Ashton (1976) J Ecol 64:171-186 contains leaf P for Nothofagus cunninghamii, Atherosperma, E. regnans, Pomaderris, E. sieberi, Platylobium.

* Used climate data, long/lats from Peeters et al (2002) Bunyip State Park study
* Sites on N and S facing slopes
* RF soil: colluvial brown loams, 50-60cm deep, 41.14g m-2 P (0-12cm)
* WS soil: krasnozem (depth ranges 60cm to 5.5m), 35.6 gm-2 P (0-12cm), pH: 5.0-5.6
* DS Soil: ranged from krasnozems to red pozolic soils pH: 5.0-5.6, 0-12cm total P 18.7 gm-2

1. Adams and Atiwill 1986. Nutrient cycling and nitrogen mineralization in eucalypt forests of south-eastern Australia. I. Nutrient cycling and nitrogen turnover. Plant and Soil 92:319-339.

-Soil descriptions of sites: SG, AA, MA1, MA2, MM1, MM2, RI, GB (%N, C, P, K, CEC, pH)

-Senescent leaf nutrients N, P, K (in mg m-2) of Eucalyptus pauciflora, E. delegatensis, E. regnans, E. oblique, E. sideroxylon and E. microcarpa.

Adams & Attiwill 1986, Plant and Soil 92:341-362 also contains site information and soil N mineralization rates.

Attiwill 1979 (III), Aust J Bot 27:439-458: contains data on the same E. obliqua sites including biomass of sapwood and leaves per unit ground area. Also reports an average wood density of 543.1 ± 8.8 kg m-3.

Attiwill 1978 (I), Aust J Bot 26:79-91: contains senescent leaf P, K for E. obliqua. Also contains litterfall rates- can use for calculating leaf lifespan??? (senescent leaf P data added from Groves et al 1996)

Attiwill 1980 (IV), Aust. J Bot 28:199-222: summary of nutrient cycling in E. obliqua stands. ADDED

Baker and Attiwill (1981) and Attiwill (1981)- Productivity in perpetuity, proceedings of Aust. Forest nutrition workshop CSIRO: contains summary of retranslocation data from different studies (in graphs) as well as litterfall and decomposition rates. (Baker and Attiwill papers from 1985 also checked but data is expressed in g m-2 of ground area).

Attiwill and May (2001) Mar. Freshwater Res 52:111-117: some 15-N data??

Attiwill and Adams (1993) New Phytologist 124:561-582: review of litter decomposition & N mineralization rates

1. Adams and Attiwill 1984, Role of Acacia Spp. In nutrient balance and cycling in regenerating Eucalyptus regnans F. Muell. Forests. I Temporal changes in biomass and nutrient content. Aust. J Bot 32:205-215.

* Soil data (0-10cm): average across all sites : 4.236% N; 0.656 g cm-3 bulk density, Krasnozems (Gn 2.11), pH 5-5.5, <2m deep.
* Also includes wood nutrient concentrations

1. Bennett and Attiwill (1996) The nutritional status of healthy and declining stands of Banksia integrifolia on the Yanakie Isthmus, Victoria. Aust. J bot 45:15-30

-Soil data (0-10cm): (Uc1.23), pH: 6.5, 1.4% C, 0.11%N, 5.6 ug g-1 extractable P

-Includes data on other leaf elements and nutrient resoprtion estimates (n = 53%, P = 57%, K = 61%). Also litterfall data and predicted LL 20 months

1. Read et al. 2000 Relationships between sclerophylly, leaf biomechanical properties and leaf anatomy in some Australian heath and forest species. Plant Biosystems 134:261-277.

* Attached raw data which was emailed to Ian (LMA, %N, %P) and cuticle / biomechanics characteristics.
* Soils reported for forest and heath sp separately (see Table 1) (0-10cm) forest: pH 4.6, coarse sand, 3.1mg g-1 N, 0.41 mg g-1 P, also report exchangeable K, Ca, Mg, Na. heath: pH 3.9, fine beach sand, 4 mg g-1 N, 0.09 mg g-1 P.
* See also Adams et al. (1994) Aust. J Bot 42:269-281 with more data on wilsons prom soils

Read & Sanson 2003 New Phytologist 160:81-99.

* LMA, %N, %P and biomechanics data (some extracted from data thief).
* No soil properties listed
* All from Melb. Bot gardens- useful???

1. Peeters et al. 2002 Correlations between leaf constituent levels and the densities of herbivorous insect guilds in an Australian forest. Austral ecology 27: 658-671.

-also: Peeters et al. 2006 Functional ecology xx1:10 and Peeters et al. 2002 Biological Journal of the Linnean Society 77:43-65. Includes data on biomechanics and leaf anatomy as well as LMA and %N, 18spp.

- Stomate density data also provided but not included in table

- Ashton (1976) J Ecol 64: 171-186: provides soil descriptions for a dry sclerophyll forest type with similar species to Peeters et al. studies and located 10km from Paula’s study sites.

- Soil ranged from krasnozems to red pozolic soils pH: 5.0-5.6, 0-12cm total P 18.7 gm-2

1. Leigh and Nicotra (2003) Sexual dimorphism in reproductive allocation and water use efficiency in Maireana pyramidata (Chenopodiaceae), a dioecious, semi-arid shrub. Aust. J Bot 51;509-514.

* Data for SLA, % N, leaf 13C- 17.245, leaf chlorophyll- 169.965umol m-2, leaf mass per stem mass, and Amass (however can’t get data off graph)!
* Location- Lake Tyrrell, NW Victoria
* Error in SLA units: m2/g 7.905 (should be cm2/g or m2/kg)?

Leigh et al. 2006 Functional Ecology 94:1261-1271 (ACT)

* Also has data for %N, SLA, Amax (data thief from graph). Note %N averaged across male vs female plants although values were sig. different. Values are averages across all three sites in ACT. Also reported chlorophyll content- 122.5umol m-2.
* No site data (long/lats, soil, MAT/MAP is provided).

QLD STUDIES

1. Westman & Rogers (1977) Nutrient stocks in a subtropical eucalypt[t forest, North Stradbroke Island. Aust. J Ecol 2:447-460

- Climate data (see Rogers 1975: Pro. Ecol Soc Aust 9:296-306), rainfall 1913-1934: 1650mm, 1972-1975: 2193mm, pan evaporation 1522mm. (Estimated 7 y since fire)

- Soil data: depth to dune: 1.2-2.5m (podzol), 0-25cm: 1.24g/cm3 bulk density; 5.10 pH, 3038kg/ha N, 2.83kg/ha acid extracted P and 1.446kg/ha base extracted P, 23.61kg/ha K, 99.47kg/ha Ca, 43.05kg/ha Mg. (Good soil references for the island included)!

- Also contains data on nutrients in old leaves, wood and roots (for three species only) (including Ca, S, Mg, Na, Fe etc).

* Senecent leaf N, P data added from Groves et al 1996 (check mismatch with green leaf conc).

Westman and Rogers (1977) Aust. J Bot 25:171-191

* Root/shoot ratio for E. signata, E. umbra and B. aemula, and root biomass, LAI
* Leaf surface area and weight divided into two young classes for Eucalyptus species <8cm2 and >8cm2. Data from >8cm2 used.
* Mycorrhizae (ECM) were observed on both Eucalypt species and cluster roots on the Banksia.
* Includes some excellent Stradbroke Is references

Rogers and Westman (1977) Aust. J Bot 25:47-58

* Rates of litterfall and nutrient content of fallen litter (possibly could use to calculate nutrient resorption%).

Westman (1978) J Ecol 66:513-531.

-Describe throughfall, stem flow and total nutrient budgets for the site (including net N and P uptake in Eucalyptus and banksias species).

Rogers and Westman (1981) Aust J Ecol 6:85-98.

* Measured root growth and leaf production
* Could calculate leaf lifespan from survivorship curves?? (authors seem to think data is no good)

Jehne and Thompson (1981) Aust. J Ecol 6:221-230.

* Report endomycorrhizea on seedlings of Pultenaea villosa and proteoid roots on Banksia integrifolia.

1. Grubb et al. (2002) UNPUBLISHED? (Except for some hypotheses in 2007 Plant Ecology paper)

* Includes Nmass, SLA and water content of leaves as well as fracture toughness of lamina.
* No soil data is included

1. Brigalow – several papers describing data from the Brigalow research centre in QLD including soils and vegetation biomass but no %N or SLA values (see Moore et al. 1967 and Dowling et al. 1986).
2. Specht and Turner (2006) Foliar nutrient concentrations in mixed-species plantations of subtropical cabinet timber species and their potential as a management tool . Forest Ecology and management 233: 324-337. (NSW)

* Johnston’s scrub site: natural rainforest remnant, no climate, soil or location given (except on map)
* Other sites were all plantations: chose Rocky creek dam site as in centre of original rainforest remnant where all species would have occurred (have seen site), an alternative would be to average across all sites but they are quite distinct. Soil (0-40cm): pH: 5.4, N 0.42%, EC 0.08dS m-1, bray P 0.96ppm, CEC: 3.94 cmol kg-1, C 4.9%, also report exchangeable K, Mg, Ca. Soil type: Red Ferrosol over Basalt (Gn 3.11)
* Additional data include foliar %Mg, Ca

1. Cromer et al (1975) Eucalypt plantations in Australia – the potential for intensive production and utilization. Appita 29: 165-173.

* Studied a plantation of Eucalyptus globules (6y old) established on cleared native forest in VIC. Reports %N, P, biomass of different tree components. Reported nutrient concentrations in a composite leaf sample rather than samples from different canopy heights. Also report wood nutrient levels.

Cromer and Williams (1982) Biomass and nutrient accumulation in a plant E. globules (labill.) fertilizer trail. Aust J Bot 30: 265-278

* Same site as earlier paper describes soil as red to brown rough ped earth.
* Lists %N and %P lower for control trees after 9.5y (P = 0.07%) vs. 6y (1975 paper). Also report litter fall rates (LEFT NUTIRENT CONC. FROM 1975 PAPER)!

1. Hatch (1955) The influence of plant litter on the Jarrah forest soils of the Dwellingup region – Western Australia. For. Tim. Bur. Leaflet 70, pp18.

* Reported litter fall, litter decomposition and nutrient concentrations in litter and green leaves of a Jarrah forest (not clear on species composition although assumed green leaf element concentration for E. marginata). Included %N, P, K, but also reported Mn, Mg and Ca.
* Climate data reported and included rainfall (1927-1952) and MAT (1934-1952), also reported saturated vapor deficit and P/E but not included in spreadsheet.
* Soil 0-7.62cm: pH: 6.26, 0.135%N, 3.48%C, clay: 5-1 to 6.1%, CEC: 9.78-10.62 m.e. %, also report exchangeable Ca and Mg.

Also Wallace and Hatch (1952) The effect of leaf litter on surface soil properties of the Jarrah forest. Aust For 16: 35-42.

* Includes litterfall and litter nutrient conc of virgin, pole and sapling forests
* Reports soil properties (slightly different to 1955 study). Therefore used 1955 study data!

1. Hydraulic papers from QLD:

-Drake and Franks (2003) Oecologia 137:321-329: Contains hydraulic traits (water pot., Ks/Kl, Huber value, 13-C, 18-O) but no nutrients or LMA. Species: Argyrodendron trifoliolatum, Doryphora aromatic, Castanospora alphandii, Calamus austrlia, Calamus caryotoides, on Atherton tablelands. NOT USED

-Cook and O’Grady (2006) Oecologia 148: 97-107: site is located in Central QLD (Pinoneer Valley), Corymbia clarksoniana, Lophostemon suaveloens, Eucalyptus platyphylla, Melaleuca viridiflora. –measured water pots, sap flow, 18-O, transpiration rate.

1. Choat et al (2006) Seasonal patterns of leaf gas exchange and water relations in dry rain forest trees of contrasting leaf phenology. TreePhys 26: 657-664.

* Data for SLA, Amax and gs (data thief from graph), as well as corresponding leaf water pots (AB = -0.5067, -1.04; AE = -0.3132, -1.3194; BA = -0.3714, -1.4609; CG = -0.4478, -1.1511).
* VPD and temperature data provided in a graph for years 1999-2001, but not included

-Choat et al (2005) Trees 19:305-311: measured water pots, Ks, Kl, wood density and xylem anatomy of 4 species (Alphitonia excels, Austromyrtus bidwillii, Brachychiton australis, Cochlospermum gillivraei) from Many Peaks Range.

1. Walker et al. (1999) plant attribute diversity, resilience, and ecosystem function: The nature and significance of dominant and minor species. Ecosystems 2:95-113.

* Measured SLA and plant height for rangeland grass species however all SLA values are in categories (no continuous data). EMAIL FOR ACTUAL DATA?

1. Leuning et al (1991) Spatial distributions of foliar nitrogen and phosphorus in crowns of Eucalyptus grandis. Oecologia 88:504-510

* Plantation of E. grandis near Gympie, measured leaf area, length, width, N, P and gas exchange, reported values for unfertilized and oldest (16month) trees only. N and P values determined with data thief.
* Another listed reference refers to gs but difficult to determine if measured or modeled.

1. Boughton (1986) Aust. J Bot 34:663-674. Outlines Acacia phyllode anatomy only
2. McIntyre et al (2005) Aust. J Bot. 53: 757-770. Describes SLA , leaf area and dry matter content of leaves from 54 weed species in southern QLD. Not included as species are not native!
3. Congdon and Herbohn (1993) series of 4 papers looking at 4 sites in tropical rainforest in QLD. Data on soil properties and litterfall nutrient concentration reported. NOT USED
4. Pearcy (1987) Photosynthetic gas exchange responses of Australian tropical forest trees in canopy, gap and understorey micro-environments. Functional Ecology 1: 169-178.

* Report values of N, P, Amax and gs, SLA for one species (used canopy values only).
* Also measured chlorophyll content: 0.99 g m-2, no climate or soil data.

1. Swanborough et al. (1998) Tree Phys. 18; 341-347. Listed data for two planted species but only Amax, and this is difficult to obtain from plots. Site is located near Atherton and Johnstone.

* Myers et al (1987) Oecologia 74: 81-85. Measured specific leaf area and leaf water potential and leaf pressure potentials of leaves from Castanospermum australe growing at the Atherton Tablelands. Climate data also supplied. NOT USED

1. Pate et al (1998) Plant Cell Environ. 21: 1231-1242. List 15-N and 13-C of 88 species from two sites. Soil data and some climate data provided. NOT USED
2. Richards et al

Site data: (Notes):

|  |
| --- |
| Rh is measured at 9am (Rh and mean T average over 2004-2006, ppt average from 1915 to 2006) |
| Total soil N reported in top 5cm but have also measure in 6 depth increments to 1 meter |
| OM calculated by doubling total C in top 5cm (also have other depth increments) |
| Weather data from SILO database (Jeffrey et al. 2001, Environ Mod & soft) |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Site.ID** | **Lat** | **Long** | **Altitude** | **mean.temp.measured** | **mean.precip.measured** | **relative.humidity.measured** | **soil.tot.N** | **clay.content** | **organic.material** |
| NorthQ1 | -16.133 | 145.433 | 5 | 25.7 | 2009.2 |  |  |  |  |
| NorthQ2 | -17.283 | 145.633 | 680 | 20.3 | 1413.0 |  |  |  |  |
| NorthQ3 | -16.100 | 145.433 | 190 | 25.7 | 2009.2 |  |  |  |  |
| Maleny | -26.750 | 152.867 | 420 | 18.8 | 1957.0 | 74.06 |  |  |  |
| Hooppine1 | -26.942 | 151.922 | 520 | 18.4 | 750.6 |  | 4.07 | 56 | 10.80 |
| Hooppine2 | -26.792 | 152.001 | 520 | 18.2 | 840.4 |  | 4.45 | 47 | 11.77 |
| Hooppine3 | -27.022 | 151.878 | 520 | 18.2 | 744.2 |  | 5.89 | 55 | 15.69 |
| Hooppine4 | -26.876 | 151.960 | 520 | 18.6 | 782.8 |  | 4.22 | 51 | 12.61 |

* Can include extra data on individual leaf size, leaf mass, water potentials, chlorophyll for N QLD only, 15-N. Also Amax data from N QLD sites not included (not confident in results…).

1. Warren et al. (2006) Ecotype adaptation and acclimation of leaf traits to rainfall in 29 species of 16-year-old Eucalyptus at two common gardens. Functional Ecology 20: 929-940.

* Data from a common garden experiment (not clear if all species grow naturally in area), measured leaf N, SLA, thickness, length/width, FW/DW, chlorophyll, rubisco, 13-C, thylakoids of 29 Eucalyptus species (averaged values across ecotypes as site had a greater effect than genotype on traits)
* Soil properties:

Mt Worth (wet, productive site): clay loam with a light medium clay subsoil, 9.1% C, 0.74% N, 97ug P g-1 resin y-1

Glencoe (dry, unproductive site): loamy sand with sand subsoil, 2.2% C, 0.061%N, 29ug P g-1 resin y-1

* No temperature data provided but reference to government report…
* \***Use FW/DW ratio to calculate H2O content**

Wilson and Hattersley et al. (1989) Report leaf anatomy, leaf size and SLA of different grass species grown under glasshouse conditions. NOT ADDED

1. Turner and Lambert (1983) Nutrient cycling within a 27-year-old Eucalyptus grandis plantation in NSW. Forest Ecol and Management 6: 155-168.

* Includes data on leaf N, P, Ca, Mg, K as well as nutrients in litter, bark and wood
* Includes a term called ‘redistribution / nutrient requirement’ which may relate partially to resorption (?)- not included!
* Averaged min and max temps, no lat longs or soil data reported although site is 8km from Coffs harbour coast.

1. Birk and Turner (1992) Response of flooded gum (E. grandis) to intensive cultural treatments: biomass and nutrient content of eucalyptus plantations and native forests. Forest Ecol and management 47: 1-28.

* report nutrient (N, P, Ca, Mg, K) content of leaves, wood and bark of E. grandis trees (9.75 y) grown in plantation. (only control, unfertilized tree values are used).
* Used average of max and min annual temperatures and average of altitude range (110-140m). Site is on N facing slope with brown earth soils and red earth soils (70cm to 2m deep)

1. Bevege (1978) Biomass and nutrient distribution in indigenous forest ecosystems, QLD Department of Forestry Technical Paper 6 20pp.

* Contains a large table of litter and green leaf nutrient concs. Tracked down original data sources except for Meakins (ANU honours thesis) and Authors unpub. Data.
* No details of site locations, soil, climate etc could be found.
* Meakins site 1 and site2 - Brindabellas wet scleophyll, site 3 Brindabellas dry sclerophyll
* Other macronutrients (Ca, Mg, Na, S) and litter nutrients also available (retranslocation?)

1. Moore et al. (1967) Dry matter and nutrient content of a subtropical semiarid forest of Acacia harpophylla F. Muell. (brigalow). Aust J Bot 15: 11-24

* Climate data of average rainfall from Hannaford station averaged 1921 to 1950
* Soil is gilgaied deep clay
* Includes biomass and nutrient content of litter and wood
* Note author describes leaf nutrients as for “leaf+twig”

1. Groves et al (1996) Book chapter in “Nutrition of Eucalypts”

* Table 4 +5: conc. Of N, P, K and Ca in heartwood, sapwood and bark of different Aust. Species.

1. Hopmans et al. (1993) Impacts of harvesting on nutrients in a eucalypt ecosystem in southeastern Australia. For Ecol & Man 59: 29-51.

* Nutrient concentrations in foliage, bark and wood of E. agglomerate, E. muelleriana, E. sieberi
* Some rainfall data, no temp.
* Soils: yellow podzolic (0-15cm): pH: 4.7, bulk density: 1.34Mg m-3, 48% gravel (>2mm), 0.38% C, 0.093% N, 0.008% P (trace elements and CEC also analysed).
* Measured litterfall and nutrient input from throughfall/ rainfall etc

1. Schortemeyer et al (unpublished) NATT data

* Have %N, SLA and Amass data
* From Susanne: long/lats, 15-N/13-C, Climate data (?), Soil N, C, pH(?), moisture content, – soil data also from other NT NATT studies(?)

1. Schmidt and Stewart (1997) Waterlogging and fire impacts on nitrogen availability and utilization in a subtropical wet heathland (wallum). PCE 20: 1231-1241. Also Schmidt (1996) thesis.

* Isotope and leaf N data (add SLA data from my site), Leaf NR and NO3 content
* Lists root specializations
* Data on soil nitrate, ammonium, amino acids, protein N from KCl and resin extracts

Schmidt and Stewart (1999) Aust. J Plant Phys 26: 253-264. List total soil N 0.3%

1. Schmidt et al (1998) Nitrogen relations of natural and disturbed plant communities in tropical Australia. Oecologia 117; 95-104.

* Also Schmidt et al. (1999) Plant and soil 215: 73-84; Schmidt and Stewart (2003) Oecologia 134; 569-577; Schmidt and Stewart (1998) Tree Phys 18: 403-410; Schmidt (1996) Thesis.
* Data from 7 Kakadu sites:

|  |  |  |  |
| --- | --- | --- | --- |
| Site | Forest | P (mg/g) | N (mg/g) |
| Kakadu1 | MINE REVEG | 1.51 | 0.03 |
| Kakadu2 | WOODLAND | 0.13 | 1.20 |
| Kakadu3 | AQUATIC (wetland) |  | 1.40 |
| Kakadu4 | DECIDUOUS MONSOON FOREST |  | 4.30 |
| Kakadu5 | BURNT WOODLAND |  | 0.60 |
| Kakadu6 | EVERGREEN MONSOON FOREST |  | 1.50 |
| Kakadu11 | ? |  |  |

* Relative water content, xylem nutrients, leaf nitrate, resin soil N and mycorrhizal status also measured
* Location/ climate data for study sites just from Jabiru location
* Sites 1 and 2 also have pH (water): 5.9; 6.7 and %C 0.83%; 0.29%

1. Schmidt and Lamble (unpub) Desert uplands

* Honours thesis data, contains data on leaf and soil trace nutrient concentrations and isotopes including %C, also xylem sap nutrients
* “Mean annual rainfall at Jericho in the southern Desert Uplands is 516 mm with 71 % falling in the six months between October and March (Clewett *et al.* 1994). Summer daily maximum temperatures are between 30 and 35°C and winter daily maximums between 20 and 25 °C (Fairfax and Fensham 2000).”
* “The soils are all included within Land Unit 32 of the Yalleroi land system described by Turner (1978): “Soils are moderately deep to deep, red earths with associated texture contrast soils and yellow earths. Surface textures are hard setting sandy loams to sandy clay loams exhibiting a surface crust. Ironstone shot occurs on soil surface and in the profile. Soil reaction trend is slightly acid throughout.”
* Soils data: did nitrate and ammonium conc (KCl extracts); N (mg/g): M: 0.55; S: 0.42, soil P data units look wrong (both sites: 0.001mg/g)-40cm depth. Also report soil %C and isotopes (13C; 15N) to different depths (5cm and 40cm).

1. Leishman et al. (2007) leaf trait relationships of native and invasive plants: community- and global-scale comparisons. New Phytologist XXXX.

* Used data for native species only (Amass, N, Rd, g, SLA), also have %C and H data not added (C/N ratio)!
* Missing site info and units
* BlueMtns Aarea values look wrong?
* Leish\_Ha may be the same site as Leish\_HS?

1. Bell (1985) Nutrient requirements for the establishment of native flora at Weipa (Conference proceedings of N Australian mine rehab workshop 9)

* Measured leaf nutrients from native species growing at Weipa
* \*\*Assumed soil collected for glasshouse study is similar to site of leaf collections\*\*
* Soil: lateritic red earth, 40% clay, pH: 5.7, 2.36% C, bicarbonate extractable P 3ug/g (includes other trace element concs).
* No climate data available

1. Pate et al. (1998) Australian mulga ecosystems- 13C and 15N natural abundances of biota components and their ecophysiological significance. PCE 21: 1231-1242

* Check if Ian has %N leaf data….

1. Lambert (1979) Sulphur relationships of native and exotic tree species, Masters Thesis, Macquarie University

* Report foliage nutrient concentrations in two different Eucalyptus stands and arboreta (not included). Also report sulphur data, litterfall rates, wood and bark nutrients, throughfall and resorption (?)
* Provides min and max temps of July & Jan only
* Soil: Bago: pH (0-15cm) 5.5; %N 0.15, %P 0.038; clay% 5 silt% 22 sand% 73

Lidsdale: Podzol – extra description in paper, 40m rooting depth (average of two sites with different parent material): pH (0-15cm) 5.21; %N 0.03, %P 0.01; clay% 4.5 silt% 26.5 sand% 69. (Also report Al, Ca, Mg, K, Na and slope, aspect).

Data also described in Turner and Lambert (1988) NZ J For Sci 18: 77-91.

1. Falster and Westoby (2005a) Alternative height strategies among 45 dicot rain forest species from tropical Queensland, Australia. J of Ecol 93: 521-535.

* Includes data on seed size, wood density and branch mass/ length ratios, Huber value (?)
* No soil data, waiting on Atherton species

Falster and Westoby (2005b) Tradeoffs between height growth rate, stem persistence and maximum height among plant species in a post-fire succession. Oikos 111: 57-66

* Also has data on seed size, stem persistence and longevity, Huber value (?)
* Data for rainfall from 105y average, sugarloaf point.
* No soil data (Holocene sands)

Falster (unpub): Mountain Ash (Eucalyptus regnans) forest, Wallaby Creek Victoria

* Waiting on %N, Huber values etc, lat/longs, climate etc

1. Marsh & Adams (1995) Decline of Eucalyptus tereticornis near bairnsdale, Victoria: Insect herbivory and nitrogen fractions in sap and foliage. Aust J bot 43:39-50.

* Report data from healthy Moormung Flora Reserve only. Give pre-dawn water potential values ~ -1.75MPa.
* Soil moisture content, nitrate and ammonium reported

WAITING ON:

**Dan’s data**, **Michelle’s site info**, **Grubb 2002 data**, **Peter Erskine-email mid-Feb**, Cath’s data??….