# SUPPLEMENTARY INFORMATION FOR:

# Plant clonality in a soil-impoverished open ecosystem: insights from southwest Australian shrublands

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Table S. Species, their clonal growth organ (CGO) status and corresponding reference collated from Eneabba, Western Australia. CGO codes refer to: herbaceous rhizome (HR), woody rhizome (WR), stolon (S), lignotuber (L), tuber (T), stem fragment (F). For ease, non-clonal (NC) status also features in the CGO column.

### Table S1

| **Family** | **Species** | **CGO** | **Reference** |
| --- | --- | --- | --- |
| Amaranthaceae | *Ptilotus drummondii* | NC | Tsakalos *et al.* (2020) |
|  | *Ptilotus manglesii* | NC | Tsakalos *et al.* (2020) |
|  | *Ptilotus polystachyus* | NC | Tsakalos *et al.* (2020) |
| Anarthriaceae | *Anarthria polyphylla* | HR | Tsakalos *et al.* (2020) |
|  | *Lyginia imberbis* | HR | Field collection LM170919/06 |
| Apiaceae | *Actinotus leucocephalus* | NC | *Actinotus leucocephalus* Benth.; L. Preiss 2056 LD1222455 |
|  | *Platysace juncea* | NC | *Platysace juncea* (Bunge) C.Norman; J. Drummond 138 K000686382 |
|  | *Platysace xerophila* | NC | Platysace xerophila (E.Pritz.) L.A.S.Johnson; E. Pritzel 988 P03238672 |
|  | *Xanthosia huegelii* | HR | D'Agui (2017) |
|  | *Xanthosia tomentosa* | NC | *Xanthosia tomentosa* A.S.George; R. Davis 9730 PERTH 05818494 |
| Araliaceae | *Hydrocotyle hispidula* | NC | *Hydrocotyle hispidula* Bunge; J.A.L. Preiss 2086 P00115412 |
|  | *Trachymene coerulea* | NC | *Trachymene coerulea* Graham; L. Press 2055 LD1223768 |
|  | *Trachymene pilosa* | NC | Western Australian Herbarium (1998–). Florabase profile 6280 (Accessed 5 Oct 2021). |
| Asparagaceae | *Acanthocarpus preissii* | HR | Western Australian Herbarium (1998–). Florabase profile 1208 (Accessed 5 Oct 2021). |
|  | *Chamaescilla versicolor* | T | Tsakalos *et al.* (2020) |
|  | *Laxmannia grandiflora* subsp. *grandiflora* | HR | *Laxmannia grandiflora* Lindl. subsp. *grandiflora*; C.M. Parker 317 PERTH 01970410 |
|  | *Laxmannia omnifertilis* | HR | *Laxmannia omnifertilis* Keighery; G.J. Keighery 2341 PERTH 01223658 |
|  | *Laxmannia ramosa* subsp. *ramosa* | HR | Western Australian Herbarium (1998–). Florabase species profile 11911 (Accessed 7 Oct 2021). |
|  | *Laxmannia sessiliflora* | HR | Field collection LM190919/14 |
|  | *Lomandra collina* | HR | Western Australian Herbarium (1998–). Florabase profile 1224 (Accessed 7 Oct 2021). |
|  | *Lomandra hastilis* | HR | Western Australian Herbarium (1998–). Florabase profile 1227 (Accessed 7 Oct 2021). |
|  | *Lomandra hermaphrodita* | HR | Western Australian Herbarium (1998–). Florabase profile 1228 (Accessed 7 Oct 2021). |
|  | *Lomandra preissii* | HR | *Lomandra preissii* (Endl.) Ewart; L. Preiss 1532 MO-202027 |
|  | *Lomandra suaveolens* | HR | Western Australian Herbarium (1998–). Florabase profile 1246 (Accessed 7 Oct 2021). |
|  | *Thysanotus arenarius* | HR | *Thysanotus arenarius* Brittan; N.H. Brittan 205 PERTH01220993 |
|  | *Thysanotus dichotomus* | HR | Tsakalos *et al.* (2020) |
|  | *Thysanotus patersonii* | T | Field collection LM180919/56 |
|  | *Thysanotus sparteus* | T | Tsakalos *et al.* (2020) |
|  | *Thysanotus spiniger* | HR | Western Australian Herbarium (1998–). Florabase profile 1353 (Accessed 5 Oct 2021). |
|  | *Thysanotus tenellus* | T | Western Australian Herbarium (1998–). Florabase profile 1354 (Accessed 7 Oct 2021). |
|  | *Thysanotus teretifolius* | T | *Thysanotus teretifolius* Brittan; S. Dougall 6 PERTH 06936407 |
|  | *Thysanotus thyrsoideus* | T | *Thysanotus thyrsoideus* Baker; J. Drummond s.n. K000794770 |
|  | *Thysanotus triandrus* | T | Thysanotus triandrus (Labill.) R.Br.; R. Davis 7558 PERTH 05171504 |
|  | *Thysanotus vernalis* | T | *Thysanotus vernalis* Brittan; N.H. Brittan 55 K000794762 |
| Asteraceae | *Blennospora drummondii* | NC | Western Australian Herbarium (1998–). Florabase profile 7856 (Accessed 5 Oct 2021). |
|  | *Gnephosis tenuissima* | NC | Western Australian Herbarium (1998–). Florabase profile 8002 (Accessed 5 Oct 2021). |
|  | *Hyalosperma cotula* | NC | *Hyalosperma cotula* (Benth.) Paul G.Wilson; J. Drummond 167 K000899442 |
|  | *Lagenophora huegelii* | HR | Wang & Bean (2019) |
|  | *Millotia myosotidifolia* | NC | Western Australian Herbarium (1998–). Florabase profile 8105 (Accessed 5 Oct 2021). |
|  | *Olearia* sp. Kennedy Range (G. Byrne 66) | NC | *Olearia* sp. Kennedy Range (G. Byrne 66); J. English 140 PERTH 07694199 |
|  | *Podolepis aristata* | NC | Western Australian Herbarium (1998–). Florabase profile 45236 (Accessed 5 Oct 2021). |
|  | *Podotheca angustifolia* | NC | Western Australian Herbarium (1998–). Florabase profile 8182 (Accessed 5 Oct 2021). |
|  | *Podotheca chrysantha* | NC | Western Australian Herbarium (1998–). Florabase profile 8183 (Accessed 5 Oct 2021). |
|  | *Podotheca gnaphalioides* | NC | Western Australian Herbarium (1998–). Florabase profile 8184 (Accessed 5 Oct 2021). |
|  | *Pterochaeta paniculata* | NC | Western Australian Herbarium (1998–). Florabase profile 13255 (Accessed 5 Oct 2021). |
|  | *Siloxerus humifusus* | NC | Western Australian Herbarium (1998–). Florabase profile 8225 (Accessed 5 Oct 2021). |
|  | *Waitzia acuminata* | NC | Western Australian Herbarium (1998–). Florabase profile 8275 (Accessed 5 Oct 2021). |
| Boryaceae | *Borya sphaerocephala* | HR | *Borya sphaerocephala* R.Br.; S. Osborne 86A PERTH 07746237 |
| Campanulaceae | *Isotoma hypocrateriformis* | NC | *Isotoma hypocrateriformis* (R.Br.) Druce; J. Drummond s.n. K000781022 |
|  | *Lobelia heterophylla* | NC | *Lobelia heterophylla* Labill.; J.J.H Labillardiere s.n. FI006946 |
|  | *Lobelia rhytidosperma* | NC | *Lobelia rhytidosperma* Benth.; J. Drummond 421 K000277933 |
|  | *Wahlenbergia gracilenta* | NC | *Wahlenbergia gracilenta* Lothian; L. Preiss 1886 LD1807938 |
| Casuarinaceae | *Allocasuarina campestris* | L | Bell *et al.,* (1995) |
|  | *Allocasuarina humilis* | L | Field collection LM170919/09 |
|  | *Allocasuarina microstachya* | L | Field collection LM021020/14 |
| Celastraceae | *Stackhousia dielsii* | NC | *Stackhousia dielsii* Pamp.; R. Davis 10034 PERTH 06006094 |
|  | *Tripterococcus brunonis* | NC | *Tripterococcus brunonis* Endl.; Collector unknown BR0000013333140 |
| Centrolepidaceae | *Centrolepis mutica* | NC | Western Australian Herbarium (1998–). Florabase profile 1132 (Accessed 5 Oct 2021). |
|  | *Centrolepis polygyna* | NC | Western Australian Herbarium (1998–). Florabase profile 1134 (Accessed 5 Oct 2021). |
| Colchicaceae | *Burchardia congesta* | T | Field collection LM180919/57 |
| Crassulaceae | *Crassula colorata* | NC | Western Australian Herbarium (1998–). Florabase profile 3137 (Accessed 5 Oct 2021). |
| Cupressaceae | *Callitris acuminata* | WR | *Callitris acuminata* (Parl.) F.Muell.; G.J. Keighery 14507 PERTH 04909151 |
|  | *Callitris arenaria* | NC | Western Australian Herbarium (1998–). Florabase profile 8002 (Accessed 5 Oct 2021). |
|  | *Callitris pyramidalis* | L | Field collection LM170919/03 |
| Cyperaceae | *Caustis dioica* | HR | Field collection LM021020/04 |
|  | *Gahnia trifida* | HR | Western Australian Herbarium (1998–). Florabase profile 907 (Accessed 5 Oct 2021). |
|  | *Lepidosperma costale* | HR | Western Australian Herbarium (1998–). Florabase profile 930 (Accessed 5 Oct 2021). |
|  | *Lepidosperma pruinosum* | HR | Western Australian Herbarium (1998–). Florabase profile 939 (Accessed 5 Oct 2021). |
|  | *Lepidosperma pubisquameum* | HR | Western Australian Herbarium (1998–). Florabase profile 940 (Accessed 5 Oct 2021). |
|  | *Lepidosperma scabrum* | HR | Groom & Lamont (2015) |
|  | *Lepidosperma* sp. P1 small head (M.D. Tindale 166A) | HR | Western Australian Herbarium (1998–). Florabase profile 16284 (Accessed 5 Oct 2021). |
|  | *Lepidosperma tenue* | HR | Western Australian Herbarium (1998–). Florabase profile 947 (Accessed 5 Oct 2021). |
|  | *Lepidosperma squamatum* | HR | Western Australian Herbarium (1998–). Florabase profile 945 (Accessed 5 Oct 2021). |
|  | *Mesomelaena preissii* | HR | *Mesomelaena preissii* Nees; L. Preiss 1796 BM000991114 |
|  | *Mesomelaena pseudostygia* | HR | Field collection LM170919/14 |
|  | *Mesomelaena stygia subsp. deflexa* | HR | Western Australian Herbarium (1998–). Florabase profile 11623 (Accessed 5 Oct 2021). |
|  | *Mesomelaena tetragona* | HR | Western Australian Herbarium (1998–). Florabase profile 957 (Accessed 5 Oct 2021). |
|  | *Schoenus andrewsii* | HR | Western Australian Herbarium (1998–). Florabase profile 971 (Accessed 5 Oct 2021). |
|  | *Schoenus brevisetis* | HR | Benwell (1998) |
|  | *Schoenus clandestinus* | HR | Western Australian Herbarium (1998–). Florabase profile 982 (Accessed 5 Oct 2021). |
|  | *Schoenus curvifolius* | HR | Western Australian Herbarium (1998–). Florabase profile 50014 (Accessed 5 Oct 2021). |
|  | *Schoenus griffinianus* | HR | Western Australian Herbarium (1998–). Florabase profile 17606 (Accessed 5 Oct 2021). |
|  | *Schoenus nanus* | NC | Western Australian Herbarium (1998–). Florabase profile 1002 (Accessed 7 Oct 2021). |
|  | *Schoenus pedicellatus* | HR | *Schoenus pedicellatus* (R.Br.) Benth.; R. Brown 6010 BM000991023 |
|  | *Schoenus pleiostemoneus* | HR | Western Australian Herbarium (1998–). Florabase profile 1009 (Accessed 5 Oct 2021). |
|  | *Schoenus rigens* | HR | Western Australian Herbarium (1998–). Florabase profile 1011 (Accessed 5 Oct 2021). |
|  | *Schoenus* sp. A3 Ciliate Sheaths (K.R. Newbey 9402) | HR | Western Australian Herbarium (1998–). Florabase profile 16274 (Accessed 7 Oct 2021). |
|  | *Schoenus* sp. Eneabba (F. Obbens & C. Godden I154) | HR | Western Australian Herbarium (1998–). Florabase profile 19945 (Accessed 7 Oct 2021). |
|  | *Schoenus subfascicularis* | HR | Western Australian Herbarium (1998–). Florabase profile 1018 (Accessed 5 Oct 2021). |
|  | *Schoenus subflavus* | HR | Western Australian Herbarium (1998–). Florabase profile 1019 (Accessed 5 Oct 2021). |
|  | *Schoenus unispiculatus* | HR | Western Australian Herbarium (1998–). Florabase profile 1026 (Accessed 5 Oct 2021). |
|  | *Tetraria microcarpa* | HR | Western Australian Herbarium (1998–). Florabase profile 50552 (Accessed 5 Oct 2021). |
|  | *Tetraria octandra* | HR | Western Australian Herbarium (1998–). Florabase profile 50553 (Accessed 7 Oct 2021). |
| Dasypogonaceae | *Calectasia hispida* | HR | Barrett & Dixon (2001) |
|  | *Calectasia narragara* | HR | Field collection LM180919/47 |
|  | *Dasypogon obliquifolius* | HR | *Dasypogon obliquifolius* Nees; K.R. Thiele 3690 PERTH 08091277 |
| Dilleniaceae | *Hibbertia acerosa* | NC | *Hibbertia acerosa* (DC.) Benth.; J. Drummond 2 TCD0009681 |
|  | *Hibbertia crassifolia* | L | Field collection LM180919/35 |
|  | *Hibbertia huegelii* | L | Field collection LM300920/02 |
|  | *Hibbertia hypericoides* | L | Field collection LM180919/22 |
|  | *Hibbertia sericosepala* | L | Thiele (2013) |
|  | *Hibbertia spicata* | L | *Hibbertia spicata* F.Muell.; K.R. Thiele 3267 PERTH 02435381 |
|  | *Hibbertia subvaginata* | NC | *Hibbertia subvaginata* (Steud.) F.Muell.; G.J. Keighery 1475 PERTH 08509476 |
| Droseraceae | *Drosera barbigera* | NC | Western Australian Herbarium (1998–). Florabase profile 3090 (Accessed 5 Oct 2021). |
|  | *Drosera echinoblastus* | NC | Western Australian Herbarium (1998–). Florabase profile 13202 (Accessed 5 Oct 2021). |
|  | *Drosera eneabba* | NC | Field collection LM180919/55 |
|  | *Drosera erythrorhiza* | T | Western Australian Herbarium (1998–). Florabase profile 3095 (Accessed 5 Oct 2021). |
|  | *Drosera glanduligera* | NC | Western Australian Herbarium (1998–). Florabase profile 3098 (Accessed 5 Oct 2021). |
|  | *Drosera humilis* | T | Western Australian Herbarium (1998–). Florabase profile 8910 (Accessed 5 Oct 2021). |
|  | *Drosera menziesii* | T | Western Australian Herbarium (1998–). Florabase profile 3109 (Accessed 5 Oct 2021). |
|  | *Drosera porrecta* | T | Western Australian Herbarium (1998–). Florabase profile 29178 (Accessed 5 Oct 2021). |
| Ecdeiocolaceae | *Ecdeiocolea monostachya* | HR | Field collection LM170919/12 |
|  | *Georgeantha hexandra* | HR | Field collection LM180919/06 |
| Ericaceae | *Andersonia heterophylla* | L | Field collection LM011020/01; *Andersonia heterophylla* Sond.; G.J. Keighery 16670 PERTH 07248539 |
|  | *Conostephium pendulum* | L | Field collection LM011020/07; *Conostephium pendulum* Benth.; M. Hislop 4035 PERTH 08290989 |
|  | *Conostephium preissii* | L | *Conostephium preissii* Sond.; M. Hislop 4027 PERTH 08290865 |
|  | *Leucopogon inflexus* | NC | *Leucopogon inflexus* Hislop; M. Hislop 2670 PERTH 06505236 |
|  | *Leucopogon oldfieldii* | L | *Leucopogon oldfieldii* Benth.; M. Hislop 3910 PERTH 08277044 |
|  | *Leucopogon prolatus* | NC | Hislop (2016) |
|  | Leucopogon sp. Northern ciliate (R. Davis 3393) | NC | *Leucopogon* sp. Northern ciliate (R. Davis 3393); R. Davis 3393 PERTH 04907108; R. Davis 9851 PERTH 05874300 |
|  | *Leucopogon stenophyllus* | NC | Hislop (2016) |
|  | *Lysinema pentapetalum* | NC | Field collection LM011020/08 |
|  | *Styphelia conostephioides* | NC | *Styphelia conostephioides* (DC.) F.Muell.; M. Hislop 4024 C PERTH 08291160 |
|  | *Styphelia filamentosa* | NC | Field collection LM011020/15 |
|  | *Styphelia filifolia* | NC | *Styphelia filifolia* Hislop & Puente-Lel.; F. Hort 1717 PERTH 05931789 |
|  | *Styphelia hispida* | L | *Styphelia hispida* (E.Pritz.) Sleumer; R. Davis 3261 PERTH 04869567 |
|  | *Styphelia microdonta* | L | *Styphelia microdonta* (Benth.) F.Muell.; M. Hislop 3850 PERTH 08083053 |
|  | *Styphelia oblongifolia* | L | *Styphelia oblongifolia* (A.J.G.Wilson & Hislop) Hislop, Crayn & Puente-Lel.; M. Hislop 3999 PERTH 08270988 |
|  | *Styphelia* sp. Eneabba (N. Marchant s.n. PERTH 01291777) | L | Inferred from similar *Styphelia oblongifolia*. |
|  | *Styphelia stomarrhena* | L | *Styphelia stomarrhena* (Sond.) Sleumer; M. Hislop 3281 PERTH 07098200 |
|  | *Styphelia tortifolia* | NC | *Styphelia tortifolia* Hislop, Crayn & Puente-Lel.; R. Davis 10059 PERTH 06059716 |
|  | *Styphelia williamsiorum* | NC | Hislop & Puente-Lelievre (2017) |
|  | *Styphelia xerophylla* | NC | *Styphelia xerophylla* (DC.) F.Muell.; R. Davis 3392 PERTH 04959388 |
| Euphorbiaceae | *Monotaxis bracteata* | L | Field collection LM021020/01 |
|  | *Monotaxis grandiflora* | L | Monotaxis grandiflora Endl.; J.A.L. Preiss 1218 MEL2066088 |
|  | *Stachystemon axillaris* | NC | Vincent *et al.* (2019) |
| Fabaceae | *Acacia auronitens* | L | *Acacia auronitens* Lindl.; B.R. Maslin 5494 PERTH 00119466 |
|  | *Acacia barbinervis* subsp. *borealis* | L | Field collection LM021020/16 |
|  | *Acacia blakelyi* | NC | Herath (2008) |
|  | *Acacia cavealis* | NC | *Acacia cavealis* R.S.Cowan & Maslin; R. Davis 3263 PERTH 04906845 |
|  | *Acacia cochlearis* | WR | *Acacia cochlearis* (Labill.) H.L.Wendl.; J. Rippey 102 PERTH 06587607; R. Davis 1813 PERTH 04602943 |
|  | *Acacia fagonioides* | WR | *Acacia fagonioides* Benth.; R. Davis 3365 PERTH 04940016 |
|  | *Acacia lasiocarpa* | NC | *Acacia lasiocarpa* var. *sedifolia* (Meisn.) Maslin; G. Warren & P. Rose 713 PERTH 06593216 |
|  | *Acacia latipes* | L | *Acacia latipes* Benth.; M.G. Allen 934 PERTH 04708776 |
|  | *Acacia moirii* subsp. *recurvistipula* | L | *Acacia moirii* subsp. *recurvistipula* Maslin; R.B. Maslin 570 PERTH 00764744 |
|  | *Acacia pulchella* | NC | Pate *et al.,* (1990) |
|  | *Acacia rostellifera* | WR | *Acacia rostellifera* Benth.; B. Maslin 7985 PERTH 05591635 |
|  | *Acacia saligna* | NC | *Acacia saligna* (Labill.) H.L.Wendl.; B.R. Maslin 10218 PERTH 08301689 |
|  | *Acacia scirpifolia* | NC | *Acacia scirpifolia* Meisn.; R. Davis 9982 PERTH 05921341 |
|  | *Acacia sessilis* | L | *Acacia sessilis* Benth.; G.J. Keighery 5181 PERTH 00138770 |
|  | *Acacia spathulifolia* | NC | Herath (2008) |
|  | *Acacia stenoptera* | L | *Acacia stenoptera* Benth.; G.J. & B.J. Keighery 1231 PERTH 08066345; R. Davis 6955 PERTH 05135524 |
|  | *Cristonia biloba* | HR | *Cristonia biloba* (Benth.) J.H.Ross; K.R. Thiele 3742 PERTH 08333602; Thompson (2010) |
|  | *Daviesia angulata* | L | *Daviesia angulata* Benth.; M.G. Allen 1018 PERTH 04619714. |
|  | *Daviesia chapmanii* | L | *Daviesia chapmanii* Crisp; E.A. Griffin 1822 PERTH 01296981; Crisp & Cook (2003) |
|  | *Daviesia daphnoides* | NC | *Daviesia daphnoides* Meisn.; R. Davis 3327 PERTH 04906659; R. Davis 9757 PERTH 06005772 |
|  | *Daviesia decurrens* | L | *Daviesia decurrens* Meisn.; N. Burrows MC83 PERTH 07104278; Crisp & Cook (2003) |
|  | *Daviesia divaricata* | L | Field collection 170919/19 |
|  | *Daviesia epiphyllum* | L | *Daviesia epiphyllum* Meisn.; R. Davis 9719 PERTH 05818427 |
|  | *Daviesia incrassata* | L | *Daviesia incrassata* Sm.; M. Hislop 4752 PERTH 09169784 |
|  | *Daviesia nudiflora* | L | Crisp & Cook (2003) |
|  | *Daviesia oxyclada* | L | *Daviesia oxyclada* Crisp; E.A. Griffin 1729 PERTH 02780224 |
|  | *Daviesia pedunculata* | NC | Field collection 021020/12 |
|  | *Daviesia podophylla* | L | Field collection 180919/26; Crisp & Cook (2003) |
|  | *Daviesia triflora* | L | Field collection 180919/07 |
|  | *Gastrolobium oxylobioides* | L | *Gastrolobium oxylobioides* Benth.; A.J. Lin 62 PERTH 06603467; D'Agui (2017) |
|  | *Gastrolobium plicatum* | L | Field collection LM180919/30 |
|  | *Gastrolobium polystachyum* | L | *Gastrolobium polystachyum* Meisn.; R. Davis 10007 PERTH 05884241; A.J. Lin 64 PERTH 06603483; D'Agui (2017) |
|  | *Gastrolobium spinosum* | NC | *Gastrolobium spinosum* Benth.; A. McGilvray 4223 PERTH 07189176; R. Davis 5044 PERTH 05024633; Pate *et al.* (1990) |
|  | *Gompholobium confertum* | NC | *Gompholobium confertum* (DC.) Crisp; R. Davis 4782 PERTH 04944194; D. Rayner & P. Schmucker M 1007-23 PERTH 07822715; D'Agui (2017) |
|  | *Gompholobium knightianum* | NC | *Gompholobium knightianum* Lindl.; R.J. Cranfield & B.G. Ward FC1081 PERTH 07353456; R. Davis 6293 PERTH 05156734; Bell *et al.* (1995) |
|  | *Gompholobium preissii* | NC | *Gompholobium preissii* Meisn.; B.G. Ward & R.J. Cranfield RJC18576 PERTH 05652375; D’Agui (2017) |
|  | *Gompholobium shuttleworthii* | L | Gompholobium shuttleworthii Meisn.; M.G. Allen 1722 PERTH 04650689 |
|  | *Gompholobium tomentosum* | NC | *Gompholobium tomentosum* Labill.; G. Byrne 652 PERTH 07425392; R. Davis 6222 PERTH 05106494; Bell *et al.* (1995) |
|  | *Hovea stricta* | L | *Hovea stricta* Meisn.; G.J. Keighery & J.J Alford 976 PERTH 02804522 |
|  | *Isotropis cuneifolia* subsp. *cuneifolia* | HR | *Isotropis cuneifolia* (Sm.) Heynh. subsp. *cuneifolia*; G.J. & B.J. Keighery 2474 PERTH 08930589; Pate *et al.* (1990). |
|  | *Jacksonia angulata* | L | *Jacksonia angulata* Benth.; J. Drummond 143 MEL250927 |
|  | *Jacksonia condensata* | NC | *Jacksonia condensata* Crisp & J.R.Wheeler; R. Davis 4601 PERTH 04938534; D’Agui (2017) |
|  | *Jacksonia floribunda* | NC | Field collection LM180919/32; *Jacksonia floribunda* Endl.; J.A. Chappill 5523 PERTH 07620950; E.A. Griffin 4696 PERTH 01944169 |
|  | *Jacksonia hakeoides* | NC | Field collection LM190919/17 |
|  | *Jacksonia lehmannii* | WR | *Jacksonia lehmannii* Meisn.; G.J. & B.J. Keighery 1097 PERTH 08032491 |
|  | *Jacksonia nutans* | NC | *Jacksonia nutans* Chappill; J. Brooker & B. Moore M907-001 PERTH 07822936 |
|  | *Jacksonia restioides* | L | *Jacksonia restioides* Meisn.; J.A.L. Preiss 1079 P00713935 |
|  | *Labichea punctata* | L | *Labichea punctat*a Benth.; M. Hislop 2776 PERTH 06316824 |
|  | *Mirbelia floribunda* | NC | *Mirbelia floribunda* Benth.; D. Rayner, S. Clune & L. Kelly RG807-34 PERTH 07845391 |
|  | *Mirbelia trichocalyx* | NC | *Mirbelia* *trichocalyx* Domin; L.A. Phillips 15 PERTH 07528957 |
|  | *Sphaerolobium pulchellum* | NC | *Sphaerolobium pulchellum* Meisn.; J. Drummond 19 K000846515 |
| Goodeniaceae | *Dampiera carinata* | HR | *Dampiera* *carinata* Benth., J. Drummond 197 BM001019779; G.J & B.J. Keighery 2635 PERTH 09028439 |
|  | *Dampiera lavandulacea* | HR | *Dampiera* *lavandulacea* Lindl.; G.J & B.J. Keighery 1786 PERTH 08908192 |
|  | *Dampiera linearis* | HR | *Dampiera* *linearis* R.Br.; R. Brown s.n. P00698837 |
|  | *Dampiera oligophylla* | HR | *Dampiera* *oligophylla* Benth.; J. Coleby-Williams 165 PERTH 02595893 |
|  | *Dampiera spicigera* | HR | *Dampiera* *spicigera* Benth.; J. Drummond 154 K000216475 |
|  | *Dampiera teres* | HR | *Dampiera* *teres* Lindl.; R.K. Brummitt, A.S. George & E.G.H. Oliver RKB21208 PERTH 06961975 |
|  | *Goodenia coerulea* | NC | *Goodenia coerulea* R.Br.; G.F. Craig 8655-1 PERTH 08950903 |
|  | *Goodenia trichophylla* | HR | *Goodenia trichophylla* de Vriese ex Benth.; J. Drummond 158 MEL24052 |
|  | *Lechenaultia biloba* | WR | *Lechenaultia biloba* Lindl.; G.J & B.J. Keighery 1410 PERTH 08503761 |
|  | *Lechenaultia hirsuta* | NC | *Lechenaultia hirsuta* F.Muell.; R. Davis 10077 PERTH 05873932 |
|  | *Lechenaultia linarioides* | WR | *Lechenaultia linarioides* DC.; G.J. Keighery 17702 PERTH |
|  | *Lechenaultia stenosepala* | WR | *Lechenaultia stenosepala* E.Pritz.; G.J. Keighery 11967 PERTH |
|  | *Scaevola anchusifolia* | HR | Field collection LM180919/04 |
|  | *Scaevola canescens* | HR | *Scaevola canescens* Benth.; E.D. Kabay 241 PERTH 03706885 |
|  | *Scaevola glandulifera* | NC | *Scaevola glandulifera* DC.; R. Davis 4600 PERTH 04938526 |
|  | *Scaevola lanceolata* | NC | *Scaevola lanceolata* Benth.; A. Rowland AR 10 PERTH 06844901; A.R. Annells & T.D Macfarlane ARA6005 PERTH 04949587 |
|  | *Scaevola phlebopetala* | NC | *Scaevola phlebopetala* F.Muell.; K.R Thiele 4023 PERTH 08429766 |
|  | *Scaevola repens* | NC | *Scaevola repens* de Vriese; A.S. George 6779 PERTH 02736985 |
|  | *Scaevola sericophylla* | NC | *Scaevola sericophylla* Benth.; H. Clarke 15 PERTH 07152140 |
|  | *Verreauxia reinwardtii* | NC | *Goodenia reinwardtii* (de Vriese) K.A.Sheph.; E.A. Griffin 520 PERTH 02767260; M.E. Phillips WA/62921 PERTH 02767481 |
| Haemodoraceae | *Anigozanthos humilis* | HR | *Anigozanthos humilis* Lindl.; G.J. & B.J. Keighery 705 PERTH 07325843 |
|  | *Anigozanthos manglesii* | HR | *Anigozanthos manglesii* D.Don; G.J. & B.J. Keigher 2330 PERTH 09028080 |
|  | *Blancoa canescens* | HR | Blancoa canescens Lindl.; J.W. Horn 2296 PERTH 05640938 |
|  | *Conostylis aculeata* subsp. *breviflora* | S | *Conostylis aculeata* subsp. *breviflora* Hopper; S.D. Hopper 222 PERTH 01222562 |
|  | *Conostylis androstemma* | HR | *Conostylis androstemma* F.Muell.; J.W. Green 1467 PERTH01222570 |
|  | *Conostylis aurea* | HR | Field collection LM180919/28 |
|  | *Conostylis candicans* | HR | *Conostylis candicans* Endl.; G.J. Keighery 13790 PERTH 04550528 |
|  | *Conostylis canteriata* | HR | Field collection LM300920/04 |
|  | *Conostylis crassinerva* | HR | *Conostylis crassinerva* J.W.Green; P. Courtney 218 PERTH 08259631 |
|  | *Conostylis dielsii* | HR | Conostylis dielsii W.Fitzg.; N.H. Speck PERTH01257412 |
|  | *Conostylis hiemalis* | HR | *Conostylis hiemalis* Hopper; S.D. Hopper 292 PERTH01184024 |
|  | *Conostylis neocymosa* | HR | Field collection LM170919/04 |
|  | *Conostylis prolifera* | S | Field collection LM180919/17 |
|  | *Conostylis resinosa* | HR | *Conostylis resinosa* Hopper; S.D. Hopper 318 PERTH01223143 |
|  | *Conostylis teretifolia* | HR | Field collection LM021020/03; *Conostylis teretifolia* J.W. Green; E. Blackall 3562 PERTH01223038 |
|  | *Conostylis teretiuscula* | HR | *Conostylis teretiuscula* F.Muell.; A.F. Oldfield MEL248091 |
|  | *Conostylis tomentosa* | HR | Field collection LM300920/12; Hopper, S.D. Hopper 5184 AD98733008 |
|  | *Haemodorum discolor* | T | *Haemodorum discolor* T.Macfarlane; G.J. & B.J. Keighery 1497 PERTH 08504075 |
|  | *Haemodorum loratum* | T | *Haemodorum loratum* T.Macfarlane; T.D. Macfarlane 1624 PERTH 08618445 |
|  | *Haemodorum simulans* | T | *Haemodorum simulans* F.Muell.; S.D. Hopper 8425 PERTH 09277285 |
|  | *Haemodorum spicatum* | T | *Haemodorum spicatum* R.Br.; E. Mattiske BS32 PERTH 08593000 |
|  | *Haemodorum venosum* | T | *Haemodorum venosum* T.Macfarlane; B.J. Keighery 329B PERTH 01780816 |
| Haloragaceae | *Glischrocaryon aureum* | HR | *Glischrocaryon aureum* (Lindl.) Orchard; K.F. Kenneally & D.J. Edinger K 12601/E 3800 PERTH 06792855 |
| Hemerocallidaceae | *Arnocrinum preissii* | HR | *Arnocrinum preissii* Lehm.; J.R. Drummond 778 P00852497; G.J. & B.J. Keighery 1812 PERTH 08491291 |
|  | *Corynotheca micrantha* | HR | *Corynotheca micrantha* (Lindl.) Druce; R. Simkin RS2320 PERTH 09206965 |
|  | *Dianella revoluta* | HR | *Dianella revoluta* R.Br.; G.J Keighery 17763 PERTH 08882576 |
|  | *Johnsonia pubescens* subsp. *pubescens* | HR | Field collection LM300920/03 |
|  | *Stawellia dimorphantha* | HR | *Stawellia dimorphantha* F.Muell.; J.R. Drummond s.n. BM000990680 |
|  | *Tricoryne elatior* | HR | *Tricoryne elatior* R.Br.; G.J. & B.J. Keighery 2281 PERTH 09203125 |
|  | *Tricoryne humilis* | T | *Tricoryne humilis* Endl.; R. Davis 6904 PERTH 05134951 |
|  | *Tricoryne* sp. Eneabba (E.A. Griffin 1200) | HR | Field collection LM021020/19 |
|  | *Tricoryne tenella* | HR | *Tricoryne tenella* R.Br.; G.J. & B.J. Keighery 2280 PERTH 09201300 |
| Iridaceae | *Patersonia occidentalis* | T | Bell *et al.* (1995) |
| Lamiaceae | *Hemiandra rubriflora* | NC | *Hemiandra rubriflora* O.H.Sarg.; R. Davis 3371 PERTH 04940075 |
|  | *Hemiandra* sp. Eneabba (H. Demarz 3687) | NC | Inferred from similar *Hemiandra rubriflora.* |
|  | *Hemiphora bartlingii* | HR | *Hemiphora bartlingii* (Lehm.) B.J.Conn & Henwood; E.A. Griffin 516 PERTH 03737349 |
|  | *Lachnostachys eriobotrya* | L | Field collection LM180919/24 |
|  | *Microcorys* sp. Coomallo (L. Haegi 2677) | HR | D’Agui (2017) |
|  | *Pityrodia viscida* | HR | *Pityrodia viscida* W.Fitzg.; M. Hislop & A. Tinker MH 2496 PERTH 06398960 |
| Lauraceae | *Cassytha glabella* | F | Field collection LM180919/36 |
| Loganiaceae | *Orianthera spermacocea* | HR | *Orianthera spermacocea* (F.Muell.) C.S.P.Foster & B.J.Conn; G.J. Keighery & B.J. Keighery 1785 PERTH 08926492 |
| Loranthaceae | *Amyema miquelii* | NC | Liddy (1983) |
|  | *Nuytsia floribunda* | WR | *Nuytsia floribunda* (Labill.) G.Don; R. Davis 439 PERTH 04968204 |
| Macarthuriaceae | *Macarthuria australis* | HR | *Macarthuria australis* Hügel ex Endl.; B.J. Lepschi & M.H. Brims 1943 PERTH |
| Malvaceae | *Guichenotia ledifolia* | NC | *Guichenotia ledifolia* Gay; C.F. Wilkins, J.A. Wedge CW2430 PERTH 08328382 |
|  | *Guichenotia macrantha* | NC | *Guichenotia macrantha* Turcz.; R. Davis 3632 PERTH 04963458; B.R. Lullfitz & N. Moore BRL110 PERTH 08150605 |
|  | *Guichenotia micrantha* | NC | *Guichenotia micrantha* (Steetz) Benth.; C.F. Wilkins & K.A. Shepherd CW2507 PERTH 08899738 |
|  | *Guichenotia sarotes* | NC | *Guichenotia sarote*s Benth.; J. Drummond 59 MEL1620987 |
|  | *Lasiopetalum drummondii* | L | Field collection LM180919/50 |
| Myrtaceae | *Babingtonia camphorosmae* | L | *Babingtonia camphorosmae* (Endl.) Lindl.; P.A Jurjevich 2169 PERTH 04823370 |
|  | *Babingtonia grandiflora* | NC | D’Agui (2017) |
|  | *Beaufortia bracteosa* | NC | D’Agui (2017) |
|  | *Beaufortia elegans* | NC | D’Agui (2017) |
|  | *Calothamnus glaber* | L | D’Agui (2017) |
|  | *Calothamnus hirsutus* | L | Field collection LM300920/08 |
|  | *Calothamnus longissimus* | L | *Calothamnus longissimus* F.Muell.; A.S. George, R.K. Brummitt & E.G.H Oliver ASG17611 PERTH 06996736 |
|  | *Calothamnus quadrifidus* | L | Field collection LM300920/07 |
|  | *Calothamnus sanguineus* | L | *Calothamnus sanguineus* Labill.; R. Davis RD 1369 PERTH 04473175 |
|  | *Calothamnus torulosus* | L | Field collection LM180919/29 |
|  | *Calytrix chrysantha* | NC | F. Nge (pers comm. 2021) |
|  | *Calytrix depressa* | NC | F. Nge (pers comm. 2021) |
|  | *Calytrix eneabbensis* | NC | F. Nge (pers comm. 2021) |
|  | *Calytrix flavescens* | NC | F. Nge (pers comm. 2021) |
|  | *Calytrix fraseri* | NC | F. Nge (pers comm. 2021) |
|  | *Calytrix oldfieldii* | NC | F. Nge (pers comm. 2021) |
|  | *Calytrix sapphirina* | L | Wilson *et al.* (2014) |
|  | *Calytrix strigosa* | NC | F. Nge (pers comm. 2021) |
|  | *Calytrix superba* | NC | F. Nge (pers comm. 2021) |
|  | *Chamelaucium uncinatum* | NC | *Chamelaucium uncinatum* Schauer; G.J. & B.J. Keighery 1860 PERTH 08925313 |
|  | *Conothamnus trinervis* | L | Field collection LM011020/05; D’Agui (2017) |
|  | *Corymbia calophylla* | L | Centre for Plant Biodiversity Research & Slee (2006) |
|  | *Darwinia neildiana* | L | Field collection LM180919/16 |
|  | *Darwinia pauciflora* | NC | *Darwinia pauciflora* Benth.; K.R Thiele 4770 PERTH 08603871 |
|  | *Darwinia sanguinea* | NC | D’Agui (2017) |
|  | *Darwinia speciosa* | L | Field collection LM011020/04 |
|  | *Eremaea beaufortioides* | L | *Eremaea beaufortioides* var. *microphylla* Hnatiuk; R.J. Hnatiuk 810017 PERTH 04614550 |
|  | *Eremaea ectadioclada* | L | Field collection LM300920/10 |
|  | *Eremaea pauciflora* | L | *Eremaea pauciflora* (Endl.) Druce; R. Davis 2780 PERTH 04650204; R.J. Hnatiuk 800198 PERTH 03908461; D’Agui (2017) |
|  | *Eremaea violacea* | L | Field collection LM170919/02 |
|  | *Eremaea* x *phoenicea* | NC | Western Australian Herbarium (1998–). Florabase profile 13956 (Accessed 5 Oct 2021). |
|  | *Eucalyptus accedens* | L | *Eucalyptus accedens* W.Fitzg.; R. Hnatiuk 780082 PERTH 01260049. |
|  | *Eucalyptus gittinsii subsp. illucida* | L | Centre for Plant Biodiversity Research & Slee (2006) |
|  | *Eucalyptus macrocarpa* subsp. *elachantha* | L | *Eucalyptus macrocarpa* subsp. *elachantha* Brooker & Hopper; S.D. Hopper 1676 PERTH 01389645 |
|  | *Eucalyptus pleurocarpa* | L | Western Australian Herbarium (1998–). Florabase profile 16180 (Accessed 13 Oct 2021). |
|  | *Eucalyptus todtiana* | L | Western Australian Herbarium (1998–). Florabase profile 5790 (Accessed 13 Oct 2021). |
|  | *Hypocalymma angustifolium* | NC | *Hypocalymma angustifolium* (Endl.) Schauer; C. Danese & D. Rayner B1006-27 PERTH 07483023 |
|  | *Hypocalymma gardneri* | WR | Field collection LM180919/34 |
|  | *Hypocalymma hirsutum* | WR | *Hypocalymma hirsutum* Strid & Keighery; C.A. Gardner 13943 PERTH 02354047 |
|  | *Hypocalymma xanthopetalum* | WR | Field collection LM180919/34 |
|  | *Kunzea micrantha* subsp. *petiolata* | NC | *Kunzea micrantha* Schauer; L. Preiss 277 LD1005405 |
|  | *Leptospermum oligandrum* | L | D’Agui (2017) |
|  | *Leptospermum spinescens* | L | Field collection LM300920/13 |
|  | *Melaleuca aspalathoides* | L | *Melaleuca aspalathoides* Schauer; A. George 17772 PERTH 07813538 |
|  | *Melaleuca ciliosa* | L | D’Agui (2017) |
|  | *Melaleuca hamata* | L | *Melaleuca hamata* Fielding & Gardner; W. O'Sullivan 1054 PERTH 05762057 |
|  | *Melaleuca hamulosa* | L | *Melaleuca hamulosa* Turcz.; R. Hnatiuk 800195 PERTH 03598055 |
|  | *Melaleuca huegelii* subsp. *huegelii* | NC | *Melaleuca huegelii* Endl. subsp. *huegelii*; R. Benken(5 PERTH 06454372 |
|  | *Melaleuca lateriflora* | NC | *Melaleuca lateriflora* Benth.; D. Rayner, S. Clune & L. Kelly JG807-27 PERTH 07844832 |
|  | *Melaleuca leuropoma* | NC | Field collection LM180919/44 |
|  | *Melaleuca marginata* | L | Inferred from similar *M. systena*. |
|  | *Melaleuca platycalyx* | NC | *Melaleuca platycalyx* Diels; L. Strahan 404 PERTH 07456220 |
|  | *Melaleuca radula* | NC | *Melaleuca radula* Lindl.; D. Rayner, S. Clune & L. Kelly RH807-24 PERTH 07845081; L.A. Phillips 58 PERTH 07790775 |
|  | *Melaleuca systena* | L | Field collection LM190919/1 |
|  | *Melaleuca trichophylla* | L | Field collection LM021020/18 |
|  | *Melaleuca urceolaris* | NC | *Melaleuca urceolaris* Benth.; E.A. Griffin 2436 PERTH 06182976 |
|  | *Melaleuca viminea* subsp. *viminea* | NC | *Melaleuca viminea* Lindl. subsp. *viminea*; R. Hart 4039 PERTH 06956165; R. Davis 10110 PERTH 06006124 |
|  | *Melaleuca zonalis* | NC | Inferred from similar *M. leuropoma* |
|  | *Phymatocarpus porphyrocephalus* | NC | D’Agui (2017) |
|  | *Pileanthus filifolius* | L | Field collection LM021020/08 |
|  | *Scholtzia chapmanii* | L | Rye (2019) |
|  | *Scholtzia involucrata* | L | *Scholtzia involucrata* (Endl.) Druce; F. Hort (2474), PERTH 06938361 |
|  | *Scholtzia laxiflora* | L | Field collection LM180919/49 |
|  | *Scholtzia* sp. Wongonderrah (M.E. & M.R. Trudgen MET 12000) | L | Rye (2019) |
|  | *Scholtzia trilocularis* | NC | Rye (2019) |
|  | *Scholtzia umbellifera* | L | Field collection LM180919/60 |
|  | *Thryptomene hyporhytis* | NC | Field collection LM180919/12 |
|  | *Thryptomene mucronulata* | NC | *Thryptomene mucronulata* Turcz.; T. Sleigh TS095 PERTH 08593078 |
|  | *Thryptomene racemulosa* | L | *Thryptomene racemulosa* Turcz.; B.L. Rye & M.E. Trudgen BLR239018 PERTH 06753124 |
|  | *Verticordia argentea* | NC | George & George (2002) |
|  | *Verticordia aurea* | NC | George & George (2002) |
|  | *Verticordia densiflora* | NC | Field collection LM180919/19; Pate *et al.* (1990) |
|  | *Verticordia grandis* | L | Field collection LM170919/16 |
|  | *Verticordia monadelpha* | NC | George & George (2002) |
|  | *Verticordia nobilis* | NC | George & George (2002) |
|  | *Verticordia ovalifolia* | L | George & George (2002) |
|  | *Verticordia pennigera* | L | George & George (2002) |
| Olacaceae | *Olax benthamiana* | NC | Griffin & Hopkins (1981); Pate, Kuo & Milburn (1990) |
|  | *Olax scalariformis* | NC | Griffin & Hopkins (1981); Pate, Kuo & Milburn (1990) |
| Orchidaceae | *Caladenia flava* | T | Western Australian Herbarium (1998–). Florabase profile 1592 (Accessed 5 Oct 2021). |
|  | *Leporella fimbriata* | T | Western Australian Herbarium (1998–). Florabase profile 1653 (Accessed 5 Oct 2021). |
|  | *Paracaleana dixonii* | T | Western Australian Herbarium (1998–). Florabase profile 13867 (Accessed 5 Oct 2021). |
|  | *Pheladenia deformis* | T | Western Australian Herbarium (1998–). Florabase profile 20460 (Accessed 5 Oct 2021). |
|  | *Pterostylis recurva* | T | Western Australian Herbarium (1998–). Florabase profile 1693 (Accessed 5 Oct 2021). |
|  | *Pyrorchis nigricans* | T | Western Australian Herbarium (1998–). Florabase profile 16367 (Accessed 5 Oct 2021). |
| Phyllanthaceae | *Phyllanthus calycinus* | L | *Phyllanthus calycinus* Labill.; M. Hislop & M. Griffiths WW197-41 PERTH 07753853; N.D. Burrows MC 126 PERTH 07017456; Pate *et al.* (1990) |
|  | *Poranthera microphylla* | NC | Field collection LM180919/26 |
| Poaceae | *Amphipogon caricinus* | HR | *Amphipogon caricinus* F.Muell.; T.D. Macfarlane 17397 PERTH 08509093 |
|  | *Amphipogon debilis* | HR | *Amphipogon debilis* R.Br.; G.J & B.J. Keighery 845 PERTH 07816049 |
|  | *Amphipogon turbinatus* | HR | Field collection LM190919/5 |
|  | *Aristida contorta* | HR | Western Australian Herbarium (1998–). Florabase profile 207 (Accessed 5 Oct 2021). |
|  | *Austrostipa compressa* | NC | *Austrostipa compressa* (R.Br.) S.W.L.Jacobs & J.Everett; J. Cullity 32 PERTH 07812000 |
|  | *Austrostipa elegantissima* | HR | Western Australian Herbarium (1998–). Florabase profile 17237 (Accessed 5 Oct 2021). |
|  | *Austrostipa exilis* | HR | *Austrostipa exilis* (Vickery) S.W.L.Jacobs & J.Everett; J.A. Cochrane, S. Comer & G. Freebury JAC4720 PERTH 06708927 |
|  | *Austrostipa hemipogon* | HR | *Austrostipa hemipogon* (Benth.) S.W.L.Jacobs & J.Everett; J. Drummond 376 MEL59933 |
|  | *Austrostipa macalpinei* | NC | Field collection LM190919/6 |
|  | *Neurachne alopecuroidea* | HR | Field collection LM180919/54 |
|  | *Rytidosperma setaceum* | HR | *Rytidosperma setaceum* (R.Br.) Connor & Edgar; T.D. Macfarlane 1407 PERTH 08883157 |
| Polygalaceae | *Comesperma acerosum* | NC | Field collection LM180919/54 |
|  | *Comesperma calymega* | NC | *Comesperma calymega* Labill., R.C. Gunn TCD0010240 |
|  | *Comesperma drummondii* | NC | Keighery (2002) |
|  | *Comesperma integerrimum* | NC | Keighery (2002) |
| Portulacaceae | *Calandrinia corrigioloides* | NC | Obbens (2006) |
| Proteaceae | *Adenanthos cygnorum* | NC | *Adenanthos cygnorum* Diels; R. Davis 9612 PERTH 05838479; Pate *et al.* (1990); D'Agui (2017) |
|  | *Adenanthos drummondii* | L | Western Australian Herbarium (1998–). Florabase profile 1779 (Accessed 13 Oct 2021). |
|  | *Banksia armata* | L | Western Australian Herbarium (1998–). Florabase profile 32682 (Accessed 13 Oct 2021). |
|  | *Banksia attenuata* | L | Griffin & Hopkins (1981) |
|  | *Banksia bipinnatifida* subsp. *multifida* | WR | *Banksia bipinnatifida* subsp. *multifida* (A.S.George) A.R.Mast & K.R.Thiele; M.G. Allen 1216 PERTH 04634160; E.A. Griffin 2415 PERTH 01805770 |
|  | *Banksia candolleana* | L | *Banksia candolleana* Meisn.; A.S. George 2342 PERTH 01708244 |
|  | *Banksia carlinoides* | NC | Field collection LM300920/06 |
|  | *Banksia chamaephyton* | WR | *Banksia chamaephyton* A.S. George; A.S. George 16928 PERTH 06037976 |
|  | *Banksia cypholoba* | WR | *Banksia cypholoba* (A.S.George) A.R.Mast & K.R.Thiele; J.E. Wajon 3044 PERTH 09140077; A.S. George 16777 PERTH 04110668 |
|  | *Banksia dallanneyi* | L | *Banksia dallanneyi* A.R.Mast & K.R.Thiele; F. & J. Hort 1792 PERTH 06253784 |
|  | *Banksia elegans* | WR | *Banksia elegans* Meisn.; S.D. Hopper 6355 PERTH 09204008 |
|  | *Banksia fraseri* | L | *Banksia fraseri* (R.Br.) A.R.Mast & K.R.Thiele; R. Davis 7127 PERTH 05135648; M. Pieroni 97/4 PERTH 06069606 |
|  | *Banksia glaucifolia* | NC | *Banksia glaucifoli*a A.R.Mast & K.R.Thiele; A.S. George 16802 PERTH 04357531 |
|  | *Banksia grossa* | L | *Banksia grossa* A.S. George; R. Hnatiuk 771549 PERTH 01731440 |
|  | *Banksia hookeriana* | L | Field collection LM180919/09 |
|  | *Banksia incana* | L | *Banksia incana* A.S. George; A.S. George 14424 PERTH 01732765 |
|  | *Banksia kippistiana* | NC | *Banksia kippistiana* (Meisn.) A.R.Mast & K.R.Thiele; A.S. George PERTH 05128935; Griffin & Hopkins (1981) |
|  | *Banksia lanata* | NC | Field collection LM011020/11 |
|  | *Banksia menziesii* | L | D’Agui (2017) |
|  | *Banksia micrantha* | L | *Banksia micrantha* A.S.George; A.S. George 14417 PERTH 01736272 |
|  | *Banksia nivea* | NC | Western Australian Herbarium (1998–). Florabase profile 32203 (Accessed 13 Oct 2021). |
|  | *Banksia prionotes* | NC | Western Australian Herbarium (1998–). Florabase profile 1842 (Accessed 5 Oct 2021). |
|  | *Banksia scabrella* | L | *Banksia scabrella* A.S.George; R. Davis 2963 PERTH 04671457 |
|  | *Banksia sessilis* | NC | *Banksia sessilis* (Knight) A.R.Mast & K.R.Thiele; B.J. Keighery 2334 PERTH 06569951 |
|  | *Banksia shuttleworthiana* | L | Field collection LM180919/52 |
|  | *Banksia sphaerocarpa* | L | *Banksia sphaerocarpa* R.Br.; K.R. Thiele 5321 PERTH 08813426 |
|  | *Banksia stenoprion* | WR | *Banksia stenoprion* (Meisn.) A.R.Mast & K.R.Thiele; F. & J. Hort 1814 PERTH 06197140; R. Davis 3217 PERTH 04695836 |
|  | *Banksia tortifolia* | WR | *Banksia tortifolia* (Meisn.) A.R.Mast & K.R.Thiele; A.S. George 16865 PERTH 05398592 |
|  | *Banksia tridentata* | L | Field collection LM011020/03 |
|  | *Conospermum boreale* | L | *Conospermum boreale* E.M.Benn.; E.M. Bennett 5085 PERTH |
|  | *Conospermum crassinervium* | NC | Western Australian Herbarium (1998–). Florabase profile 1864 (Accessed 13 Oct 2021). |
|  | *Conospermum nervosum* | NC | *Conospermum nervosum* Meisn.; R. Davis 3320 PERTH 04906594; D’Agui (2017) |
|  | *Conospermum stoechadis* | L | *Conospermum stoechadis* Endl.; R. Spjut & R. Smith 12445 PERTH 04612426 |
|  | *Conospermum unilaterale* | NC | D’Agui (2017) |
|  | *Conospermum wycherleyi* | L | Field collection LM170919/18; Pate *et al.* (1990) |
|  | *Grevillea biformis* | NC | *Grevillea biformis* Meisn.; R. Davis 293 PERTH 07438516; R. Davis 3657 PERTH 04866401 |
|  | *Grevillea eriostachya* | L | Field collection LM180919/27 |
|  | *Grevillea pinaster* | L | Wilson (2000) |
|  | *Grevillea rudis* | L | D’Agui (2017) |
|  | *Grevillea shuttleworthiana* subsp. *canarina* | NC | *Grevillea shuttleworthiana* subsp. *canarina* Olde & Marriott; R. Davis 3265 PERTH 04869575 |
|  | *Grevillea synapheae* | L | D’Agui (2017) |
|  | *Hakea auriculata* | L | Field collection LM170919/10 |
|  | *Hakea candolleana* | L | Field collection LM011020/02 |
|  | *Hakea conchifolia* | L | Field collection LM180919/03 |
|  | *Hakea costata* | NC | *Hakea costata* Meisn.; R. Davis 3214 PERTH 04695798; D’Agui (2017) |
|  | *Hakea cygna* subsp. *cygna* | NC | *Hakea cygnus* Lamont subsp. *cygnus*; B. Lamont & B.J. Keighery PERTH 01777076 |
|  | *Hakea eneabba* | L | Field collection LM170919/08 |
|  | *Hakea flabellifolia* | L | Field collection LM180919/10 |
|  | *Hakea gilbertii* | NC | Wilson (1999) |
|  | *Hakea incrassata* | L | Field collection LM180919/46 |
|  | *Hakea lissocarpha* | L | *Hakea lissocarpha* R.Br.; M. Hislop, & M. Griffiths WW 140-3 PERTH 06976611; R. Davis 4553 PERTH 04936493 |
|  | *Hakea neospathulata* | L | *Hakea neospathulata* I.M.Turner; R. Davis 3276 PERTH 04696239; D’Agui (2017) |
|  | *Hakea polyanthema* | NC | D’Agui (2017) |
|  | *Hakea prostrata* | L | Griffin & Hopkins (1981); Wilson (1999) |
|  | *Hakea psilorrhyncha* | NC | Field collection LM300920/05; Wilson (1999) |
|  | *Hakea smilacifolia* | NC | *Hakea smilacifolia* Meisn.; R. Davis 3335 PERTH 04939484; D’Agui (2017) |
|  | *Hakea stenocarpa* | L | Wilson (1999) |
|  | *Hakea trifurcata* | NC | Pate *et al.* (1990); Wilson (1999) |
|  | *Isopogon adenanthoides* | NC | *Isopogon adenanthoides* Meisn.; R. Davis 3317 PERTH 04906551; D’Agui (2017) |
|  | *Isopogon divergens* | NC | *Isopogon divergens* R.Br.; R. Davis RD 2094 PERTH 04583914 |
|  | *Isopogon dubius* | L | *Isopogon dubius* (R.Br.) Druce; M.G. Allen 1554 PERTH 04654374 |
|  | *Isopogon inconspicuus* | L | *Isopogon inconspicuus* (Meisn.) Foreman; R.V. Smith 66/198 PERTH 01864467 |
|  | *Isopogon linearis* | L | Western Australian Herbarium (1998–). Florabase profile 2232 (Accessed 13 Oct 2021). |
|  | *Isopogon tridens* | L | D'Agui (2017) |
|  | *Lambertia multiflora* | L | Field collection LM300920/01 |
|  | *Persoonia acicularis* | L | Field collection LM021020/09 |
|  | *Persoonia filiformis* | L | Western Australian Herbarium (1998–). Florabase profile 14563 (Accessed 13 Oct 2021). |
|  | *Persoonia rudis* | L | McCarthy (1995) |
|  | *Petrophile brevifolia* | L | *Petrophile brevifolia* Lindl.; K.R Thiele 3500 PERTH 08150079 |
|  | *Petrophile drummondii* | NC | Field collection LM170919/17 |
|  | *Petrophile linearis* | L | Field collection LM180919/02 |
|  | *Petrophile macrostachya* | L | Field collection LM011020/10 |
|  | *Petrophile megalostegia* | L | *Petrophile megalostegia* F.Muell.; R. Davis 3288 PERTH 04869532; R.J Cranfield 8000 PERTH 01470760 |
|  | *Petrophile scabriuscula* | NC | *Petrophile scabriuscula* Meisn.; R. Davis 3264 PERTH 04696182 |
|  | *Petrophile shuttleworthiana* | L | Bowen (1991); D’Agui (2017) |
|  | *Petrophile striata* | L | *Petrophile striata* R.Br.; R. Davis 4378 PERTH 04929268; R. Davis 6933 PERTH 05135273 |
|  | *Stirlingia latifolia* | L | Field collection LM180919/41 |
|  | *Strangea cynanchicarpa* | L | *Strangea cynanchicarpa* (Meisn.) F.Muell.; C.A. Gardner PERTH 01708317; Bowen & Pate (2017) |
|  | *Synaphea spinulosa* | NC | Field collection LM180919/01 |
|  | *Xylomelum angustifolium* | WR | McCarthy (1995) |
| Restionaceae | *Alexgeorgea nitens* | HR | Pate, Meney & Dixon (1991) |
|  | *Alexgeorgea subterranea* | HR | *Alexgeorgea subterranea* Carlquist; R.K. Brummitt, A.S. George & E.G.H Oliver RKB21167 PERTH 07001568; Pate, Meney & Dixon (1991) |
|  | *Chordifex sinuosus* | HR | Field collection LM180919/21 |
|  | *Desmocladus asper* | HR | Pate *et al.,* (1991); Briggs & Johnson (2001) |
|  | *Desmocladus elongatus* | HR | Pate *et al.,* (1991); Briggs & Johnson (2001) |
|  | *Desmocladus flexuosus* | HR | Pate *et al.,* (1991); Briggs & Johnson (2001) |
|  | *Desmocladus lateriticus* | HR | Briggs & Johnson (2001) |
|  | *Desmocladus parthenicus* | HR | Briggs & Johnson (2001) |
|  | *Desmocladus semiplanus* | HR | Pate et al., (1991); Briggs & Johnson (2001) |
|  | *Desmocladus virgatus* | HR | Briggs & Johnson (2001) |
|  | *Lepidobolus chaetocephalus* | HR | Field collection LM011020/09; *Pate et al*., (1991) |
|  | *Lepidobolus preissianus* | HR | Field collection LM180919/39; Pate *et al.*, (1991) |
|  | *Lepidobolus quadratus* | HR | Pate et al., (1991); Meney *et al.*, (1996) |
|  | *Cryptandra myriantha* | NC | Rye (2007) |
|  | *Cryptandra nutans* | NC | Rye (2007) |
|  | *Cryptandra scoparia* | NC | Rye (2007) |
|  | *Polianthion wichurae* | NC | Kellermann, Rye & Thiele (2006) |
|  | *Stenanthemum humile* | NC | *Stenanthemum humile* Benth.; J. Drummond K000732089 |
|  | *Stenanthemum notiale* | NC | *Stenanthemum notiale* Rye; R. Davis RD838 PERTH 04476565 |
| Rubiaceae | *Opercularia spermacocea* | HR | *Opercularia spermacocea* Juss.; G.J. Keighery 15788 PERTH 05809193 |
|  | *Opercularia vaginata* | HR | *Opercularia vaginata* Juss.; G.J. Keighery 17271 PERTH 09072926 |
| Rutaceae | *Boronia cymosa* | NC | *Boronia cymosa* Endl.; R. Davis 9878 PERTH 05918820 |
|  | *Cyanothamnus ramosus*  subsp. *anethifolius* | L | Griffin & Hopkins (1981) |
|  | *Cyanothamnus coerulescens*  subsp.*spicatus* | NC | Western Australian Herbarium (1998–). Florabase profile 50113 (Accessed 13 Oct 2021). |
|  | *Diplolaena eneabbensis* | NC | *Diplolaena eneabbensis* Paul G.Wilson; R. Davis 10069 PERTH 05921597 |
|  | *Diplolaena ferruginea* | NC | *Diplolaena ferruginea* Paul G.Wilson; G.J. Keighery 2557 PERTH 00916846 |
|  | *Geleznowia verrucosa* | NC | D’Agui (2017) |
|  | *Philotheca spicata* | L | *Philotheca spicata* (A.Rich.) Paul G.Wilson; R.L. Barrett & K.L. Wilson RLB5314 PERTH 08727708 |
| Santalaceae | *Santalum acuminatum* | WR | Tennakoon, Pate & Arthur (1997) |
| Sapindaceae | *Dodonaea divaricata* | NC | West (1980) |
|  | *Dodonaea ericoides* | NC | West (1980) |
|  | *Dodonaea pinifolia* | NC | West (1980) |
| Stylidiaceae | *Levenhookia octomaculata* | NC | *Levenhookia octomaculata* F.L.Erickson & J.H.Willis; J.A. Wege 2074 PERTH 08543712 |
|  | *Levenhookia pusilla* | NC | *Levenhookia pusilla* R.Br.; J.A. Wege & C. Wilkins JAW2072 PERTH 08544042 |
|  | *Levenhookia stipitata* | NC | *Levenhookia stipitata* (Benth.) Benth.; J.A. Wege 2075 PERTH 08544069 |
|  | *Stylidium adpressum* | S | *Stylidium adpressum* Benth.; G. Byrne 4207 PERTH 08455007 |
|  | *Stylidium bicolor* | HR | *Stylidium bicolor* Lindl.; J. Drummond s.n, K000355198 |
|  | *Stylidium burbidgeanum* | S | *Stylidium burbidgeanum* Lowrie & Kenneally; J.A. Wege, J.A. & W.S. Armbruster JAW1695 PERTH 08360561 |
|  | *Stylidium calcaratum* | NC | *Stylidium calcaratum* R.Br.; R.L. Barrett & M.D. Barrett RLB5889 PERTH 09300392 |
|  | *Stylidium crossocephalum* | S | Field collection LM021020/13; *Stylidium crossocephalum* F.Muell.; J. Drummond MEL2156185 |
|  | *Stylidium cygnorum* | S | *Stylidium cygnorum* W.Fitzg.; W.V. Fitzgerald E00279232 |
|  | *Stylidium dichotomum* | S | *Stylidium dichotomum* DC.; J.E. Wajon 3834 PERTH 09279296 |
|  | *Stylidium diuroides* subsp. *paucifoliatum* | HR | *Stylidium diuroides* subsp. *paucifoliatum* Lowrie & Carlquist; A. Crawford 1422 PERTH 07823622; J. Drummond K000060598 |
|  | *Stylidium flagellum* | S | *Stylidium flagellum* Lowrie, A.H.Burb. & Kenneally; G.J & B.J. Keighery 1696 PERTH 08655936 |
|  | *Stylidium maitlandianum* | HR | Field collection LM180919/53 |
|  | *Stylidium miniatum* | HR | *Stylidium miniatum* Mildbr.; J. Drummond 277 G00358809 |
|  | *Stylidium ponticulus* | HR | *Stylidium ponticulus* Lowrie & Kenneally; J.A. Wege & C. Wilkins JAW612 PERTH 07812833 |
|  | *Stylidium purpureum* | HR | *Stylidium purpureum* Wege; J.A. Wege 1868 PERTH 08542422 |
|  | *Stylidium repens* | S | Field collection LM180919/59 |
|  | *Stylidium rigidulum* | S | *Stylidium rigidulum* Sond.; A.F Oldfield K000060853 |
|  | *Stylidium scariosum* | HR | *Stylidium scariosum* DC.; J. Drummond s.n. K000060223 |
| Thymelaeaceae | *Pimelea angustifolia* | NC | *Pimelea angustifolia* R.Br.; W. Bayly AEB 7 PERTH 08498555 |
|  | *Pimelea floribunda* | NC | D’Agui (2017) |
|  | *Pimelea leucantha* | NC | D’Agui (2017) |
|  | *Pimelea suaveolens* | NC | *Pimelea suaveolens* Meisn. subsp. *suaveolens*; D. Rooks DJR9 PERTH 07467524 |
|  | *Pimelea sulphurea* | L | Herath (2008) |
| Violaceae | *Hybanthus floribundus* | NC | Western Australian Herbarium (1998–). Florabase profile 5221 (Accessed 13 Oct 2021). |
| Xanthorrhoeaceae | *Xanthorrhoea* sp. Lesueur (G.J. Keighery 16404) | NC | Western Australian Herbarium (1998–). Florabase profile 20658 (Accessed 13 Oct 2021). |
| Zamiaceae | *Macrozamia* sp. Eneabba (D.L. Jones 12402) | NC | Western Australian Herbarium (1998–). Florabase profile 18119 (Accessed 13 Oct 2021). |

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Chart, box and whisker chart

Description automatically generated

Figure S1 Boxplot of the species richness grouped according to the clonal growth organ (CGO) diversity recorded (A) in all 138 plots, (B) 119 plots of the sandy shrubland, and (C) 18 plots of the clayey shrubland. One plot from clayey kwongan with a CGO diversity of 3 was removed from the statistical analyses. Overall differences between the CGO groups are reported using non-parametric Welch ANOVA or parametric A (top of the plots). The type of post-hoc pairwise comparisons (pwc) are reported at the bottom of the plot; results of these analyses are reported above the individual CGO diversity boxes.

### Figure S1

Chart

Description automatically generated

Figure S2 Boxplot of the soil bulk density grouped according to the clonal growth organ (CGO) diversity recorded (A) in all 138 plots, (B) 119 plots of the sandy shrubland, and (C) 18 plots of the clayey kwongan. One plot from clayey shrubland with a CGO diversity of 3 was removed from the statistical analyses. Overall differences between the CGO groups are reported using non-parametric Welch ANOVA or parametric ANOVA (top of the plots).

### Figure S2

Chart, box and whisker chart

Description automatically generated

Figure S3 Boxplot of the soil Total Nitrogen (Total N; %) grouped according to the clonal growth organ (CGO) diversity recorded (A) in all 138 plots, (B) 119 plots of the sandy shrubland, and (C) 18 plots of the clayey shrubland. One plot from clayey kwongan with a CGO diversity of 3 was removed from the statistical analyses. Overall differences between the CGO groups are reported using non-parametric Welch ANOVA or parametric ANOVA (top of the plots).

### Figure S3

Chart, box and whisker chart

Description automatically generated

Figure S4 Boxplot of the soil Total Phosphorus (Total P; mgkg-1) grouped according to the clonal growth organ (CGO diversity recorded (A) in all 138 plots, (B) 119 plots of the sandy shrubland, and (C) 18 plots of the clayey shrubland. One plot from clayey kwongan with a CGO diversity of 3 was removed from the statistical analyses. Overall differences between the CGO groups are reported using non-parametric Welch ANOVA or parametric ANOVA (top of the plots).

### Figure S4

Table S. Beta regression modelling of the bulk density (water availability, WA), Total phosphorus (Total P) and Total Nitrogen (Total N) on the abundance weighted shrubland data. The variance explained by the model is presented using the marginal r2 (r2m; variance explained by the fixed effects) and the conditional r2 (r2c; variance explained by the entire model, fixed plus random effects).

### Table S2

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CGO | effects | Estimate | Std. Error | z.value | PR (>|z|) |  | **r**2m | **r**2c |
| clonal | (Intercept) | 1.001 | 0.266 | 3.757 | <0.001 | \*\*\* | 0.047 | 1.212 |
| WA | 0.027 | 0.027 | 4.575 | <0.001 | \*\*\* |
| Total\_P | -0.011 | 0.006 | -1.807 | <0.001 | 0 |
| Total\_N | 0.075 | 0.075 | 11.366 | <0.001 | \*\*\* |
| stem  fragment | (Intercept) | -4.729 | 0.157 | -30.112 | <0.001 | \*\*\* | 0.032 | 0.092 |
| WA | 0.148 | 0.01 | 15.08 | <0.001 | \*\*\* |
| Total\_P | -0.061 | 0.01 | -6.082 | <0.001 | \*\*\* |
| Total\_N | 0.041 | 0.01 | 4.106 | <0.001 | \*\*\* |
| lignotuber | (Intercept) | -0.388 | 0.133 | -2.921 | <0.01 | \*\* | 0.142 | 0.734 |
| WA | 0.006 | 0.005 | 1.331 | 0.183 |  |
| Total\_P | 0.073 | 0.005 | 16.018 | <0.001 | \*\*\* |
| Total\_N | 0.056 | 0.005 | 11.16 | <0.001 | \*\*\* |
| herbaceous  rhizome | (Intercept) | -1.14 | 0.104 | -10.982 | <0.001 | \*\*\* | 0.069 | 0.291 |
| WA | 0.049 | 0.006 | 8.872 | <0.001 | \*\*\* |
| Total\_P | -0.046 | 0.005 | -9.129 | <0.001 | \*\*\* |
| Total\_N | 0.056 | 0.006 | 10.007 | <0.001 | \*\*\* |
| woody  rhizome | (Intercept) | -3.632 | 0.173 | -21.038 | <0.001 | \*\*\* | 0.064 | 0.115 |
| WA | -0.106 | 0.011 | -9.336 | <0.001 | \*\*\* |
| Total\_P | -0.117 | 0.012 | -9.756 | <0.001 | \*\*\* |
| Total\_N | -0.239 | 0.013 | -18.038 | <0.001 | \*\*\* |
| stolon | (Intercept) | -4.239 | 0.242 | -17.549 | <0.001 | \*\*\* | 0.047 | 0.181 |
| WA | 0.133 | 0.011 | 12.128 | <0.001 | \*\*\* |
| Total\_P | 0.048 | 0.009 | 5.167 | <0.001 | \*\*\* |
| Total\_N | -0.121 | 0.011 | -10.794 | <0.001 | \*\*\* |
| tuber | (Intercept) | -4.056 | 0.014 | -284.904 | <0.001 | \*\*\* | <0.001 | <0.001 |
| WA | -0.196 | 0.01 | -18.964 | <0.001 | \*\*\* |
| Total\_P | -0.03 | 0.01 | -2.918 | 0.004 | \*\* |
| Total\_N | 0.109 | 0.011 | 10.299 | <0.001 | \*\*\* |

**Table S3.** Generalised linear mixed effects modelling of the bulk density (water availability, wa), Total phosphorus (Total P) and Total Nitrogen (Total N) on the unweighted shrubland data. The variance explained by the model is presented using the marginal r2 (r2m; variance explained by the fixed effects) and the conditional r2 (r2c; variance explained by the entire model, fixed plus random effects).

### Table S3

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CGO | effects | Estimate | Std. Error | z.value | PR (>|z|) |  | r2m | r2c |
| clonal | (Intercept) | 0.977 | 0.309 | 3.162 | 0.002 | \*\* | 0.001 | 0.634 |
| WA | -0.033 | 0.032 | -1.013 | 0.311 |  |
| Total\_P | -0.054 | 0.031 | -1.771 | 0.077 | . |
| Total\_N | 0.028 | 0.033 | 0.854 | 0.393 |  |
| stem  fragment | (Intercept) | -4.23 | 0.108 | -39.014 | 0 | \*\*\* | 0.024 | 0.024 |
| WA | 0.188 | 0.122 | 1.543 | 0.123 |  |
| Total\_P | -0.049 | 0.108 | -0.453 | 0.651 |  |
| Total\_N | 0.007 | 0.114 | 0.061 | 0.951 |  |
| lignotuber | (Intercept) | -0.733 | 0.283 | -2.587 | 0.01 | \*\* | 0.016 | 0.612 |
| WA | -0.044 | 0.027 | -1.623 | 0.105 |  |
| Total\_P | -0.003 | 0.026 | -0.107 | 0.915 |  |
| Total\_N | 0.039 | 0.028 | 1.376 | 0.169 |  |
| herbaceous  rhizome | (Intercept) | -0.862 | 0.028 | -30.96 | 0 | \*\*\* | 0.015 | 0.015 |
| WA | 0.029 | 0.029 | 1.032 | 0.302 |  |
| Total\_P | -0.023 | 0.027 | -0.845 | 0.398 |  |
| Total\_N | -0.009 | 0.03 | -0.292 | 0.77 |  |
| woody  rhizome | (Intercept) | -3.714 | 0.084 | -44.002 | 0 | \*\*\* | 0.051 | 0.051 |
| WA | -0.12 | 0.081 | -1.486 | 0.137 |  |
| Total\_P | -0.065 | 0.084 | -0.77 | 0.441 |  |
| Total\_N | -0.202 | 0.09 | -2.255 | 0.024 | \* |
| stolon | (Intercept) | -3.556 | 0.078 | -45.542 | 0 | \*\*\* | 0.025 | 0.025 |
| WA | 0.125 | 0.084 | 1.49 | 0.136 |  |
| Total\_P | 0.03 | 0.075 | 0.393 | 0.695 |  |
| Total\_N | -0.047 | 0.083 | -0.57 | 0.569 |  |
| tuber | (Intercept) | -3.498 | 0.26 | -13.438 | 0 | \*\*\* | 0.063 | 0.181 |
| WA | -0.123 | 0.081 | -1.509 | 0.131 |  |
| Total\_P | -0.104 | 0.084 | -1.232 | 0.218 |  |
| Total\_N | 0.149 | 0.087 | 1.716 | 0.086 | . |