

KEY TO SOME AUSTRALIAN FLOWERING PLANT FAMILIES

(modified from Beadle, Evans and Carolin 1982. *Flora of the Sydney Region*, Reed Books, Sydney)

ANGIOSPERMAE

- A.** Embryo with 2 cotyledons. Leaf venation usually reticulate. Flowers usually 4-5 or 5-merous (sometimes 3-merous, in which case the plants are usually branching trees, shrubs or parasitic twiners). Habit various.

DICOTYLEDONS

- *A.** Embryo with 1 cotyledon. Leaf venation usually parallel. Flowers usually 3-merous. Plants usually herbaceous (if tree-like then more or less unbranched).

MONOCOTYLEDONS

DICOTYLEDONS

- A.** 2 or more carpels free, ie. flowers with 2 or more separate superior ovaries. **GROUP 1**
- *A.** Either, 2 or more carpels fused; or, carpel solitary, ie. ovary solitary, superior or inferior.
- B.** Either, petals free; or, perianth segments free and arranged in one whorl, or flower without petals and sepals.
- C.** Ovary superior or flowers without a perianth.
- D.** Either, stamens up to twice as many as the petals (or perianth members), very rarely three times as many and then arranged in three whorls; or flowers without perianth
- E.** Either, only one whorl of perianth present, or perianth in two whorls of 3 members each, or perianth absent.
- F.** Either stamens adnate to the perianth, or perianth absent. **GROUP 2**
- *F.** Stamens free; perianth present. **GROUP 3**
- *E.** Calyx and corolla both present, although one whorl sometimes dropping off early (look for scars).
- G.** Corolla zygomorphic (bilaterally symmetric). **GROUP 4**
- *G.** Corolla actinomorphic (radially symmetric).
- H.** Either, stamens twice as many as sepals (rarely more but even then definite and constant); or, equal in number to sepals and alternating with conspicuous staminodes; flowers bisexual. **GROUP 5**
- *H.** Either, stamens fewer than twice as many as petals (rarely alternating with minute staminodes); or, flowers unisexual. **GROUP 6**
- *D.** Stamens numerous and indefinite. **GROUP 7**
- *C.** Ovary inferior or half-inferior. **GROUP 8**
- *B.** Either, petals fused; or, perianth segments fused and arranged in a single whorl.
- I.** Ovary superior.
- J.** Leaves opposite or whorled (rarely whorled in Epacridaceae which is included under ***J**) **GROUP 9**
- *J.** Leaves alternate or all basal.
- K.** Stamens adnate to corolla tube (or perianth tube) or fused (very rarely free and then plants with scale-leaves and angular stems).
- L.** Only one perianth whorl present or petals minute. **GROUP 10**
- *L.** Calyx and corolla both present; petals as large as, larger, or only slightly smaller than sepals,. **GROUP 11**
- *K.** Stamens free from each other and from corolla (or perianth). **GROUP 12**
- *I.** Ovary inferior or half-inferior. **GROUP 13**

GROUP 1

- A.** Petals fused.
- B.** Petals free at the base and above but fused or sticking together in the middle. **STACKHOUSIACEAE**
- *B.** Petals fused at the base.
- C.** Styles free.
- D.** Leaves succulent. **CRASSULACEAE**
- *D.** Leaves not succulent. **CONVOLVULACEAE**
- *C.** Styles fused above.
- E.** Pollen granular **APOCYNACEAE**
- *E.** Pollen grains in each anther lobe adhering in a single mass. **ASCLEPIADACEAE**
- *A.** Petals free or absent.
- F.** Either, styles fused or coherent above or stigmas united; or, style solitary and gynobasic.
- G.** Style solitary, arising from a pit in the top of the ovary (gynobasic). **RUTACEAE**
- *G.** Styles fused or sticking together above, attached to the summit of the ovary.
- H.** Carpels buried in the hemispherical receptacle. **EUPOMATIACEAE**
- *H.** Carpels not buried in the receptacle. **STERCULIACEAE**
- *F.** Styles free from one another.
- I.** Aquatic herbs with entire floating leaves. **CABOMBACEAE**
- *I.** Not aquatic herbs or if so then leaves much divided and submerged.
- J.** Leaves aromatic when crushed.
- K.** Leaves alternate. **WINTERACEAE**
- *K.** Leaves opposite. **MONIMIACEAE**
- *J.** Leaves not aromatic.
- L.** Herbs with succulent leaves. **CRASSULACEAE**
- *L.** Trees shrubs, climbers or herbs with leaves not as in L.
- M.** Stamens perigynous (Fig 6.3). **ROSACEAE**
- *M.** Stamens hypogynous (Fig 6.3).
- N.** Either, trees or shrubs; or, climbers with simple leaves.
- O.** Corolla yellow, conspicuous. **DILLENIACEAE**
- *O.** Corolla (perianth) greenish-yellow and inconspicuous or reduced to scales.
- P.** Climbers with sepal-like perianth. **MENISPERMACEAE**
- *P.** Trees with petal-like sepals. **STERCULIACEAE**
- *N.** Either, herbs; or climbers with compound leaves. **RANUNCULACEAE**

GROUP 2

- A.** Leaves reduced to scales; twining rootless parasites. **CASSYTHACEAE**
- *A.** Leaves conspicuous.
- B.** Flowers without petals or sepals.
- C.** Herbs.
- D.** Plants aquatic or creeping on mud. **CALLITRICHACEAE**
- *D.** Plants not as in D. **PIPERACEAE**
- *C.** Trees or shrubs. **SALICACEAE**
- *B.** Perianth present.
- E.** Perianth segments 4, deciduous. **PROTEACEAE**
- *E.** Either, perianth segments 5-6; or, 4 and persistent into the fruiting stage.
- F.** Staminodes bearded below the middle. **OLACACEAE**
- *F.** Staminodes, when present, glabrous.
- G.** Herbs or climbers.
- H.** Stipules forming a sheath that surrounds the stem. **POLYGONACEAE**
- *H.** Stipules not as above or absent.
- I.** Herbs.
- J.** Leaves simple. **CARYOPHYLLACEAE**
- *J.** Leaves pinnate. **ROSACEAE**
- *I.** Climbers. **BASELLACEAE**
- *G.** Trees **LAURACEAE**

GROUP 3

- A. Latex present in the bark. **MORACEAE**
- *A. Latex absent.
 - B. Climbers; flowers unisexual; plants dioecious. **MENISPERMACEAE**
 - *B. Not climbers, rarely scrambling.
 - C. Perianth segments dry and membranous; filaments of stamens often fused basally. **AMARANTHACEAE**
 - *C. Perianth segments herbaceous or petaloid; filaments only rarely fused basally.
 - D. Either, style solitary, simple (thread-like or capitate); or, rarely, a tuft of hairs on the summit of the ovary.
 - E. Either, herbs; or, trees with leaves covered with stinging hairs.
 - F. Stigma capitate, sometimes obscurely lobed. **BRASSICACEAE**
 - *F. Stigma thread-like or a tuft of hairs on the summit of the ovary. **URTICACEAE**
 - *E. Trees or shrubs without stinging hairs.
 - G. Ovary and fruit lobed. **SAPINDACEAE**
 - *G. Ovary not distinctly lobed.
 - H. Either, leaves all compound; or, reduced to thorns on main branches and simple on side branches. **BERBERIDACEAE**
 - *H. Leaves all simple, not reduced to thorns.
 - I. Flowers arranged in a panicle (Fig 6.9). **ICACINACEAE**
 - *I. Flowers arranged in a raceme (Fig 6.9). **PHYTOLACCACEAE**
 - *D. Styles several or single and branched above.
 - J. Stipules forming a sheath around the stem. **POLYGONACEAE**
 - *J. Stipules never forming a sheath around the stem, sometimes absent.
 - K. Ovary with only 1 locule.
 - L. Trees, tall shrubs or woody climbers. **ULMACEAE**
 - *L. Herbs or small shrubs.
 - M. Styles or stylar branches 2-3. **CHENOPODIACEAE**
 - *M. Styles 4 (rarely 3); leaves opposite. **CARYOPHYLLACEAE**
 - *K. Ovary with two or more locules.
 - N. Flowers unisexual. **EUPHORBIACEAE**
 - *N. Flowers bisexual.
 - O. Plants aquatic or creeping on mud. **ELATINACEAE**
 - *O. Plants not aquatic or creeping on mud. **PHYTOLACCACEAE**

GROUP 4

- A. Sepals 2. **FUMARIACEAE**
- *A. Sepals 4-5.
 - B. Two lateral sepals large and petaloid. **POLYGALACEAE**
 - *B. Sepals all more or less similar in texture.
 - C. Stamens 5 -6 with no staminodes.
 - D. Stamens 5 **VIOLACEAE**
 - D* Stamens 4 long, 2 short **BRASSICACEAE**
 - *C. Stamens 3-10 with staminodes completing the complement to 10, rarely 8 with no staminodes.
 - E. Calyx with a projection (spur) arising from its base or side, the spur is free from the pedicel. **TROPAEOLACEAE**
 - *E. Calyx without a spur or with a spur fused to the pedicel.
 - F. Style with 5 branches. **GERANIACEAE**
 - *F. Style unbranched.
 - G. Posterior petal (at the top of the flower) with the edges overlapped (inside) by the lateral ones (see Fig A, page 106). **CAESALPINIACEAE**
 - *G. Posterior petal overlapping (outside) the lateral ones. **FABACEAE**

GROUP 5

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| <p>A. Sepals 2-3.</p> <p>* A. Sepals more than 3.</p> <p style="padding-left: 20px;">B. Leaves dotted with translucent oil glands; style arising from a pit in the summit of the ovary.</p> <p style="padding-left: 20px;">*B. Leaves without oil glands; style(s) arising on the summit of ovary.</p> <p style="padding-left: 40px;">C. Style solitary, unbranched.</p> <p style="padding-left: 60px;">D. Stamens perigynous.</p> <p style="padding-left: 60px;">*D. Stamens hypogynous.</p> <p style="padding-left: 80px;">E. Style capitate.</p> <p style="padding-left: 80px;">*E. Style thread-like.</p> <p style="padding-left: 100px;">F. Small shrubs; stamens opening by terminal pores.</p> <p style="padding-left: 100px;">*F. Trees or shrubs; stamens opening by longitudinal slits.</p> <p style="padding-left: 40px;">*C. Styles several, or single and branched above.</p> <p style="padding-left: 60px;">G. Trees or shrubs.</p> <p style="padding-left: 80px;">H. Leaves compound.</p> <p style="padding-left: 100px;">I. Fruit a drupe, not lobed.</p> <p style="padding-left: 120px;">*I. Fruit winged, dry; ovary lobed.</p> <p style="padding-left: 100px;">*H. Leaves simple or deeply lobed.</p> <p style="padding-left: 60px;">*G. Herbs.</p> <p style="padding-left: 80px;">J. Leaves with 3 leaflets.</p> <p style="padding-left: 60px;">* J. Leaves simple or pinnately compound (see Fig.1.1, 1.2).</p> <p style="padding-left: 80px;">K. Corolla yellow.</p> <p style="padding-left: 100px;">L. Prostrate herb, leaves compound.</p> <p style="padding-left: 120px;">*L. Erect herbs; leaves simple, entire to pinnatisect (see Fig.1.1).</p> <p style="padding-left: 100px;">*K. Corolla pink, white or blue.</p> <p style="padding-left: 120px;">M. Leaves simple, not deeply divided; ovary usually with a single locule.</p> <p style="padding-left: 140px;">*M. Leaves deeply dissected or compound; ovary with 5 locules.</p> | <p>PORTULACACEAE</p>
<p>RUTACEAE</p>
<p>LYTHRACEAE</p>
<p>MELIACEAE</p>
<p>TREMANDRACEAE</p>
<p>SAPINDACEAE</p>
<p>ANACARDIACEAE</p> <p>SIMAROUBACEAE</p> <p>STERCULIACEAE</p>
<p>OXALIDACEAE</p>
<p>ZYGOPHYLLACEAE</p> <p>RESEDACEAE</p>
<p>CARYOPHYLLACEAE</p> <p>GERANIACEAE.</p> |
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GROUP 6

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| <p>A. Flowers unisexual; styles free.</p> <p>*A. Flowers bisexual or both unisexual and bisexual; or, flowers all unisexual and the ovary with a solitary style.</p> <p style="padding-left: 20px;">B. Sepals 2-3; petals more numerous.</p> <p style="padding-left: 20px;">*B. Sepals more than 3, petals same in number or fewer.</p> <p style="padding-left: 40px;">C. Leaves dotted with translucent oil glands; style arising from a pit in the summit of the ovary.</p> <p style="padding-left: 40px;">*C. Leaves without oil glands; style usually terminal on the ovary.</p> <p style="padding-left: 60px;">D. Stamens 2.</p> <p style="padding-left: 60px;">*D. Stamens more than 2.</p> <p style="padding-left: 80px;">E. Stamens adnate to a stalk bearing the ovary above the centre of the floral receptacle.</p> <p style="padding-left: 80px;">*E. Stamens not as in E.</p> <p style="padding-left: 100px;">F. Stamens 6 or more.</p> <p style="padding-left: 100px;">G. Stamens hypogynous.</p> <p style="padding-left: 120px;">H. Herbs.</p> <p style="padding-left: 140px;">I. Styles separate, 3; petals 5.</p> <p style="padding-left: 160px;">*I. Styles simple or bilobed; petals 4.</p> <p style="padding-left: 120px;">*H. Trees or shrubs.</p> <p style="padding-left: 140px;">J. Style branched.</p> <p style="padding-left: 160px;">*J. Style simple.</p> <p style="padding-left: 100px;">*G. Stamens perigynous.</p> <p style="padding-left: 60px;">*F. Stamens 3-5.</p> <p style="padding-left: 80px;">K. Herbs.</p> <p style="padding-left: 100px;">L. Leaves covered with sticky glandular hairs which trap insects.</p> | <p>EUPHORBIACEAE</p>
<p>PORTULACACEAE</p>
<p>RUTACEAE</p>
<p>OLEACEAE</p>
<p>PASSIFLORACEAE</p>
<p>MOLLUGINACEAE</p> <p>BRASSICACEAE</p>
<p>ACERACEAE</p> <p>SAPINDACEAE</p> <p>LYTHRACEAE</p> |
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- DROSERACEAE**
- *L. Leaves not as above.
 - M. Petals white or pink.
 - N. Style undivided **PRIMULACEAE**
 - *N. Styles or style branches 2-5 **CARYOPHYLLACEAE**
 - *M. Petals blue or yellow. **LINACEAE**
 - *K. Trees, shrubs, climbers or scramblers.
 - O. Climbers with leaf-opposed tendrils. **VITACEAE**
 - *O. Not as in O.
 - P. Leaves simple.
 - Q. Stamens perigynous. **RHAMNACEAE**
 - *Q. Stamens hypogynous.
 - R. Ovary with 3 or more lobes or angles.
 - S. Leaves bearing stellate hairs, petals minute. **STERCULIACEAE**
 - *S. Leaves without stellate hairs. **SAPINDACEAE**
 - *R. Ovary not prominently lobed or angled, but sometimes compressed.
 - T. Flower containing a prominent disc. **CELASTRACEAE**
 - *T. Disc absent or inconspicuous.
 - U. Ovules attached to the top of the ovary (apical) and hanging down; tall tree with fluted trunk. **ICACINACEAE**
 - *U. Ovules attached to axile or parietal placentas; trees or shrubs without a fluted trunk, or scramblers.
 - V. Trees or scramblers not armed with thorns, or fruit orange. **PITTOSPORACEAE**
 - *V. Shrubs armed with thorns; fruit purple. **VIOLACEAE**
 - *P. Leaves compound.
 - W. Ovary with 3 locules (rarely 4); stamens free from each other. **SAPINDACEAE**
 - *W. Either ovary with 5 locules and stamens free; or ovary with 3 locules and stamens fused into a tube around the pistil. **MELIACEAE**

GROUP 7

- A. Either flowers all unisexual or mixed unisexual and bisexual flowers present.
 - B. Ovary with a single locule; leaves aromatic when crushed. **WINTERACEAE**
 - *B. Ovary with 2-3 locules; leaves not aromatic. **EUPHORBIACEAE**
- *A. Flowers bisexual; leaves not aromatic.
 - C. Sepals 2-3 or united into a calyptrum (cap) that falls as flower opens.
 - D. Placentas axile or basal (Fig 6.6).
 - E. Herbs. **PORTULACACEAE**
 - *E. Trees or shrubs. **EUCRYPHIACEAE**
 - *D. Placentas parietal (Fig 6.6).
 - F. Herbs; ovary on a very short stalk. **PAPAVERACEAE**
 - *F. Small tree or scrambling shrub; ovary borne above the floral receptacle on a long stalk. **CAPPARACEAE**
 - *C. Sepals 4 or more and not united into a calyptrum.
 - G. Stamens fused into a tube or column surrounding the style. **MALVACEAE**
 - *G. Stamens free or sometimes fused into bundles but never forming a tube or column.
 - H. Leaves opposite or whorled.
 - I. Aquatic plants with whorled leaves. **CERATOPHYLLACEAE**
 - *I. Not as in I.

- J.** Stipules arising between the paired leaf bases but sometimes falling early (look for scars). **CUNONIACEAE**
- *J.** Stipules absent.
 - K.** Leaves simple. **HYPERICACEAE**
 - *K.** Leaves compound, with 3 leaflets. **BAUERACEAE**
- *H.** Leaves alternate.
 - L.** Leaves compound, or if simple, flattened in the plane of the stem (ie., vertical), and with one or more glands on the upper edge. **MIMOSACEAE**
 - *L.** Leaves simple without marginal glands.
 - M.** Ovary with 2-5-locules; placentas axile (Fig 6.6).
 - N.** Corolla yellow. **OCHNACEAE**
 - *N.** Corolla white to pink. **ELAEOCARPACEAE**
 - *M.** Ovary with a single locule; placentas parietal (Fig 6.6).
 - O.** Ovary borne on a stalk above the floral receptacle. **CAPPARACEAE**
 - *O.** Ovary borne directly on the receptacle.
 - P.** Herbs. **RESEDACEAE**
 - *P.** Trees or shrubs. **FLACOURTIACEAE**

GROUP 8

- A.** Plants with broad, jointed, succulent stems bearing spines. **CACTACEAE**
- *A.** Not as in A.
 - B.** Either inner or outer stamens petal-like and numerous.
 - C.** Outer stamens numerous and petal-like; prostrate succulent herbs. **AIZOACEAE**
 - *C.** Inner stamens numerous and petal-like; rainforest shrubs or small trees. **EUPOMATIACEAE**
 - *B.** No petal-like stamens; each perianth whorl with up to 8 parts.
 - D.** Sepals 2. **PORTULACACEAE**
 - *D.** Either, sepals more than 2; or, one perianth whorl with more than 2 members.
 - E.** Either, stamens numerous; or, stamens 5-10 and leaves dotted with translucent oil glands.
 - F.** Flowers in compound, axillary, leafless spikes (Fig 6.9); leaves without oil glands. **SYMPLOCACEAE**
 - *F.** Flowers not arranged as in F; leaves usually with translucent oil glands visible. **MYRTACEAE**
 - *E.** Stamens up to twice as many as petals (or perianth members when only one whorl is present); leaves without oil glands.
 - G.** Flowers unisexual; perianth in whorls of 4. **HALORAGACEAE**
 - *G.** Flowers bisexual (rarely unisexual, and then with perianth in whorls of 3 or 5).
 - H.** Stipules arising between the paired leaf bases. (Look for scars if stipules have fallen, also look at the new growth) **CUNONIACEAE**
 - *H.** Stipules not as above or absent.
 - I.** Stamens not more than the number of petals (or tepals).
 - J.** Stamens opposite petals (or tepals).
 - K.** Flowers in dense heads surrounded by large showy bracts **APIACEAE**
 - *K.** Flowers not as above
 - L.** Either, parasites growing on a branch of a tree; or, shrubs with linear tepals surrounded by a hood-shaped structure. **LORANTHACEAE**
 - *L.** Terrestrial plants; flowers not as above.
 - M.** Leaves reduced to scales. **SANTALACEAE**
 - *M.** Leaves well developed. **RHAMNACEAE**
 - *J.** Stamens alternating with petals (or tepals).
 - N.** Only one perianth whorl present.
 - O.** Inflorescence a cyme or raceme **RHAMNACEAE**
 - *O.** Inflorescence an umbel **APIACEAE**
 - *N.** Two perianth whorls present.
 - P.** Flowers solitary in the leaf axils. **CELASTRACEAE**
 - *P.** Flowers in umbels or heads or pairs (Fig 6.9).
 - Q.** Herbs or small shrubs; fruit usually with a swelling at the base of the styles. **APIACEAE**
 - *Q.** Trees, shrubs, woody climbers or creepers; fruit not as above. **ARALIACEAE**
 - *I.** Stamens twice as many as petals. **ONAGRACEAE**

GROUP 9

- A. Stamens fewer than corolla lobes (or perianth lobes, or calyx lobes if the corolla is markedly zygomorphic).
- B. Woody climbers or epiphytes.
 - C. Leaves compound. **BIGNONICAEAE**
 - *C. Leaves simple. **GESNERICAEAE**
- *B. Not climbers or epiphytes but occasionally scrambling.
 - D. Stamens 2; corolla radially symmetric.
 - E. One perianth whorl only present. **THYMELAEACEAE**
 - *E. Calyx and corolla both present. **OLEACEAE**
 - *D. Either, stamens more than 2; or, stamens 2 and corolla zygomorphic.
 - F Upper part of the ovary distinctly lobed; style arising from the base of the ovary between the lobes.
 - G. Style branches equal. **LAMIACEAE**
 - *G. Style branches unequal. **VERBENACEAE**
 - *F. Upper part of the ovary not distinctly lobed; style arising on the summit of the ovary.
 - H. Shrubs or trees.
 - I. Petals 4. **SCROPHULARIACEAE**
 - *I. Petals 5 or corolla clearly 2-lipped. **VERBENACEAE**
 - *H. Herbs.
 - J. Plants with small reduced leaves. **VERBENACEAE**
 - *J. Plants with well developed leaves.
 - K. Flowers in terminal inflorescences with reduced bracts.
 - L. Flowers sessile, in dense spikes (Fig 6.9). **VERBENACEAE**
 - *L. Flowers stalked, in panicles or racemes (or if in spikes then calyx 4-lobed). **SCROPHULARIACEAE**
 - *K. Flowers borne singly in axils of leafy bracts.
 - M. Corolla tube narrow, cylindrical. **ACANTHACEAE**
 - *M. Corolla tube broadening upwards. **SCROPHULARIACEAE**
- *A. Stamens equal to or more numerous than number of corolla lobes (or perianth lobes).
- N. Calyx and corolla both present.
 - O. Anthers opening by terminal pores. **ERICACEAE**
 - *O. Anthers opening by longitudinal slits.
 - P. Stamens free from corolla; pollen spreading freely. **RUTACEAE**
 - *P. Either, stamens epipetalous (or almost free and then with pollen adhering to form a single mass from each anther).
 - Q. At least some stamens opposite the corolla lobes.
 - R. Stamens 4-5. **PRIMULACEAE**
 - *R. Stamens 8. **CRASSULACEAE**
 - *Q. Stamens alternating with corolla lobes.
 - S. Flowers zygomorphic. **VERBENACEAE**
 - *S. Flowers radially symmetrical.
 - T. Either, corolla lobes contorted in the bud or, if valvate then plants are climbers with a capitate stigma (see Fig A, page 108).
 - U. Pollen adhering in a mass. **ASCLEPIADACEAE**
 - *U. Pollen spreading freely.
 - V. Climbers or herbs forming runners. **APOCYNACEAE**
 - *V. Herbs never forming runners. **GENTIANACEAE**
 - *T. Corolla lobes valvate, cochlear or quincuncial in the bud (see Fig A, page 108). **LOGANIACEAE**
- *N. One perianth whorl only present.
 - W. Stamens adnate to perianth tube, not circinnate in the bud (see Fig A, p108).
 - X. Perianth lobes valvate in the bud. **PROTEACEAE**
 - *X. Perianth lobes imbricate in the bud (see Fig A, page 108).
 - Y. Stipules absent. **THYMELAEACEAE**
 - *Y. Stipules present or leaves connected by a raised line or membrane. **CARYOPHYLLACEAE**
 - *W. Stamens free from perianth tube, circinnate in the bud (Fig A, p108). **NYCTAGINACEAE**

GROUP 10

- A. Stamens fused.
 - B. Either, flowers bisexual; or, unisexual with perianth covered by stellate hairs. **STERCULIACEAE**
 - *B. Flowers unisexual; perianth glabrous. **EUPHORBIACEAE**
- *A. Stamens free from one another but adnate to perianth.
 - C. Stipules forming a sheath around the stem. **POLYGONACEAE**
 - *C. Stipules not forming a sheath around the stem, or stipules absent.
 - D. Perianth lobes small and greenish.
 - E. Plants giving milky juice when damaged. **EUPHORBIACEAE**
 - *E. Plants not secreting milky juice.
 - F. Style branched. **ULMACEAE**
 - *F. Style simple. **URTICACEAE**
 - *D. Perianth lobes large (rarely greenish).
 - G. Perianth lobes valvate in the bud (see Fig A, page 108).
 - H. Perianth lobes 5-6 (petals). **OLACACEAE**
 - *H. Perianth lobes 4. **PROTEACEAE**
 - *G. Perianth lobes imbricate in the bud (Fig A, p108). **THYMELAEACEAE**

GROUP 11

- A. Stamens fused.
 - B. Style bearing cup-like ring of hairs below stigma. **BRUNONIACEAE**
 - *B. Not as above.
 - C. Flowers zygomorphic. **POLYGALACEAE**
 - *C. Flowers radially symmetric.
 - D. Leaves sessile, stem-sheathing. **EPACRIDACEAE**
 - *D. Leaves petiolate.
 - E. Stamens 5 (Mangrove shrub). **MYRSINACEAE**
 - *E. Not mangrove shrubs; stamens usually numerous. **MALVACEAE**
- *A. Stamens free from each other but epipetalous.
 - F. Flowers unisexual; plants dioecious. **EBENACEAE**
 - *F. Flowers bisexual.
 - G. Shrubs; flowers with a group of sepal-like bracts below the sepals; anthers opening by a single longitudinal slit. **EPACRIDACEAE**
 - *G. Flowers without sepal-like bracts below sepals; anthers opening by 2-4 longitudinal slits or apical pores.
 - H. Upper part of the ovary distinctly lobed; style arising from the base of the ovary between the lobes. **BORAGINACEAE**
 - *H. Upper part of the ovary not distinctly lobed; style arising on the summit of the ovary.
 - I. Corolla lobes contorted, valvate or induplicate in the bud (see Fig A, p108).
 - J. Stamens opposite corolla lobes.
 - K. Herbs. **PLUMBAGINACEAE**
 - *K. Trees or shrubs. **MYRSINACEAE**
 - *J. Stamens alternating with corolla lobes.
 - L. Aquatic plants. **MENYANTHACEAE**
 - *L. Not aquatic plants.
 - M. Climbers with pinnate leaves (Fig.1.2). **POLEMONIACEAE**
 - *M. Not as in M.
 - N. More or less erect herbs or shrubs. **SOLANACEAE**
 - *N. Climbers, twiners or prostrate herbs. **CONVOLVULACEAE**
 - *I. Corolla lobes quincuncial or cochlear in the bud (see Fig A, p108).
 - O. Leaves with parallel venation or deeply lobed with one main vein, arranged in a basal rosette. **PLANTAGINACEAE**
 - *O. Leaves not as above.
 - P. Herbs.
 - Q. Stamens 2, sometimes with 2 staminodes ; placentas free-central (Fig 6.6). **LENTIBULARIACEAE**
 - *Q. Stamens 4, placentas axile. **SCROPHULARIACEAE**
 - *P. Trees or shrubs.

- R.** Either, stamens more than 5; or, stamens 5 and opposite corolla lobes, alternating with staminodes. **SAPOTACEAE**
- *R.** Either, stamens 5 and alternating with corolla lobes; or, stamens 4.
- S.** Stamens 4 (sometimes also with 1 staminode).
- T.** Leaves linear. **SELAGINACEAE**
- *T.** Leaves lanceolate to elliptic or oblong (Fig 1.2). **MYOPORACEAE**
- *S.** Stamens 5. **EHRETIACEAE**

GROUP 12

- A.** Flowers all unisexual (male flowers often with rudimentary ovary and female flowers with staminodes); plants dioecious.
- B.** Ovary with up to 5 locules.
- C.** Both calyx and corolla present. **EBENACEAE**
- *C.** Only one perianth whorl present. **EUPHORBIACEAE**
- *B.** Ovary with 10 or more locules; corolla absent. **GYROSTEMONACEAE**
- *A.** Either flowers bisexual; or, flowers unisexual and plants monoecious.
- D.** Flowers zygomorphic. **GOODENIACEAE**
- *D.** Flowers radially symmetric.
- E.** Petals free at the base, but fused into a tube above with spreading limbs. **STACKHOUSIACEAE**
- *E.** Petals or perianth segments fused basally.
- F.** One perianth whorl only present.
- G.** Leaves simple.
- H.** Ovary with 2 or more locules; plants covered with stellate hairs. **STERCULIACEAE**
- *H.** Ovary with a single locule; stellate hairs absent. **CHENOPODIACEAE**
- *G.** Leaves compound. **SAPINDACEAE**
- *F.** Calyx and corolla present.
- I.** Sepals 2-3. **PORTULACACEAE**
- *I.** Sepals 4-5.
- J.** Leaves compound. **MIMOSACEAE**
- *J.** Leaves simple.
- K.** Leaf attached in plane of stem (lamina vertical); upper edge of leaf bearing one or more donut-shaped glands. **MIMOSACEAE**
- *K.** Leaf attached transversely to stem; adaxial and abaxial surfaces present; marginal glands absent.
- L.** Anthers opening by terminal pores. **ERICACEAE**
- *L.** Anthers opening by longitudinal slits.
- M.** Trees; leaf bases not forming a sheath around the stem.
- N.** Ovules attached to the top of the locule, hanging downwards. **ICACINACEAE**
- *N.** Ovules attached to axile or parietal placentas. **PITTOSPORACEAE**
- *M.** Shrubs or small shrubs with sheathing leaf bases. **EPACRIDACEAE**

GROUP 13

- A.** Style bearing an indusium at the base of the stigma. **GOODENIACEAE**
- *A.** Style not as above.
- B.** Tendrils present, arising in, or near, leaf axils. **CUCURBITACEAE**
- *B.** Not as in B.
- C.** Stamens fused to form a tube around the style, or anthers 2 and adnate to the style
- D.** Stamens 2 and adnate to the style. **STYLIDIACEAE**
- *D.** Stamens 3-5 and free from the style.
- E.** Flowers grouped into dense heads surrounded by numerous bracts. **ASTERACEAE**
- *E.** Flowers not grouped into heads. **LOBELIACEAE**
- *C.** Stamens free from each other and from the style (although sometimes epipetalous).
- F.** Only one perianth whorl present.

- G.** Stamens as many as and opposite perianth lobes.
- H.** Parasites growing on the branches of trees. **LORANTHACEAE**
- *H.** Terrestrial plants.
 - I.** Leaves reduced to minute scales. **SANTALACEAE**
 - *I.** Leaves well developed.
 - J.** Flowers unisexual. **HALORAGACEAE**
 - *J.** Flowers bisexual. **SANTALACEAE**
- *G.** Either, stamens as many as and alternating with perianth lobes; or, stamens more numerous than perianth lobes.
 - K.** Flowers grouped into a capitulum (Fig 6.9) and surrounded by radiating white or pinkish bracts. **APIACEAE**
 - *K.** Flowers not as above.
 - L.** Plants prostrate with more or less succulent leaves. **AIZOACEAE**
 - *L.** Not as above.
 - M.** Leaves apparently whorled or opposite; stipules occurring between the leaf bases. **RUBIACEAE**
 - *M.** Leaves alternate or opposite; stipules if present, not as above. **RHAMNACEAE**
- *F.** Calyx and corolla present.
 - N.** Stamens as many as corolla lobes and opposite them; or, stamens more numerous than corolla lobes.
 - O.** Stamens as many as corolla lobes (often with alternating staminodes). **PRIMULACEAE**
 - *O.** Stamens more numerous than corolla lobes.
 - P.** Flowers arranged in compound, axillary, leafless spikes (Fig 6.9); leaves without translucent oil glands. **SYMPLOCACEAE**
 - *P.** Flowers not as above; translucent oil glands usually visible in the leaves. **MYRTACEAE**
 - *N.** Stamens as many as corolla lobes and alternating with them.
 - Q.** Stamens epipetalous.
 - R.** Herbs. **MENYANTHACEAE**
 - *R.** Trees, shrubs or scramblers.
 - S.** Leaves opposite with stipules between the leaf bases. **RUBIACEAE**
 - *S.** Leaves opposite, stipules absent (leaves sometimes connected by a raised line). **CAPRIFOLIACEAE**
 - *Q.** Stamens free from petals.
 - T.** Herbs. **CAMPANULACEAE**
 - *T.** Trees or shrubs. **ESCALLONIACEAE**

MONOCOTYLEDONS

- A. Ovary inferior **GROUP 1**
- *A. Ovary superior
- B. At least one whorl of the perianth petaloid, or perianth segment solitary and petaloid **GROUP 2**
- *B. Both whorls of the perianth not petaloid, or one or both absent **GROUP 3**

GROUP 1

- A. Stamens, stigma and style fused into a single central structure (the column);
anther sunken in the apex of the column **ORCHIDACEAE**
- *A. Stamens and style and stigma separate (not as above)
- B. Stamens 6
- C. Climbers or twiners with no specialised basal leaves **DIOSCOREACEAE**
- *C. Erect herbs with a tuft of radical leaves
- D. Coarse herbs more than 2m high **AGAVACEAE**
- *D. Herbs less than 2 m high
- E. Inflorescence a short raceme or flower solitary **HYPOXIDACEAE**
- *E. Inflorescence umbellate, leaves without petioles **AMARYLLIDACEAE**
- *B. Fertile stamens 3
- F. Style simple ; capsule with 1-2 seeds per loculus **HAEMODORACEAE**
- *F. Style branched; capsules with more than 2 seeds per loculus **IRIDACEAE**

GROUP 2

- A. Tall trees or shrubs with annular leaf scars;
- B. Leaves palmatifid or pinnate, sometimes with flexuose tips to the segments **ARECACEAE**
- *B. Leaves linear, undivided **AGAVACEAE**
- *A. Herbs or climbers or twiners, sometimes woody below
- C. Leaves undivided, spirally coiled at the tip, woody climber **FLAGELLARIACEAE**
- *C. Leaves not spirally coiled at the tip
- D. Plants with cladodes; leaves reduced to scales **ASPARAGACEAE**
- *D. Plants without cladodes, leaves usually well developed
- E. Climbers or scramblers
- F. Leaves with several prominent longitudinal veins; the
connecting lateral veins obscure **LUZURIAGACEAE**
- *F. Leaves with 3-5 longitudinal veins; some connecting lateral
veins prominent **SMILACACEAE**
- *E. Herbs, sometimes woody towards the base, or plants tree-like
- G. Flowers unisexual **LOMANDRACEAE**
- *G. Flowers bisexual
- H. Flowers in umbels or heads, sometimes opening one at a
time
- I. Outer perianth segments green, herbaceous; leaf sheath closed
(ie the margins fused) **COMMELINACEAE**
- *I. Outer perianth segments not green; leaf sheath open (ie with overlapping
margins or margins that do not meet) or absent
- J. Inner perianth segments yellow **XYRIDACEAE**
- *J. Inner perianth segments not yellow
- K. Plants with rhizomes or corms or without underground
stems; umbels or flowering heads with several bracts
at the base or none **ANTHERICACEAE**
- *K. Plants with bulbs; umbels with one large scarious bract
(spathe) at the base **ALLIACEAE**
- *H. Flowers in racemes, spikes or panicles or solitary
- L. Perianth segments fused into a tube longer than the lobes

- M.** Flowers about 10cm long **LILIACEAE**
- *M.** Flowers less than 8cm long **BLANDFORDIACEAE**
- *L.** Perianth segments free or fused into a tube shorter than the lobes
 - N.** Flowers in a large complex spike **XANTHORRHOEACEAE**
 - *N.** Flowers in racemes or panicles
 - O.** Perianth deciduous after flowering **ASPHODELACEAE**
 - *O.** Perianth persistent after flowering
 - P.** Leaves distichous **PHORMIACEAE**
 - *P.** Leaves not distichous **ANTHERICACEAE**

GROUP 3

- A.** Flowers grouped into spikelets, each flower covered by a glumaceous bract (ie. most of the grass-like plants)
 - B.** Leaf sheath closed or rarely open and then the perianth reduced to bristles or minute scales **CYPERACEAE**
 - *B.** Leaf sheath open
 - C.** Leaves reduced to sheathing scales arranged along the stem, sometimes with short laminas; flowers usually unisexual and dioecious **RESTIONACEAE**
 - *C.** Leaves not reduced to sheathing scales; **POACEAE**
- *A.** Flowers not grouped into spikelets and not covered with glumaceous bracts
 - D.** Tall trees **ARECACEAE**
 - *D.** Not tall trees
 - E.** Flowers unisexual
 - F.** Flowers arranged in panicles or interrupted spikes **LOMANDRACEAE**
 - *F.** Flowers crowded into dense spikes with a single large bract (spathe) at the base **ARACEAE**
 - *E.** Flowers bisexual
 - G.** Climbers **LUZURIAGACEAE**
 - *G.** Herbs or tree-like plants
 - H.** Perianth segments 4; flowers in a dense continuous spike **ARACEAE**
 - *H.** Perianth segments 6
 - I.** Flowers borne on filiform pedicels in a contracted raceme **ANTHERICACEAE**
 - *I.** Flowers not as above
 - J.** Leaves not ensheathing the stout stem **XANTHORRHOEACEAE**
 - *J.** Leaves completely ensheathing the narrow stem
 - K.** Flowers in racemes or spikes **JUNCAGINACEAE**
 - *K.** Flowers in cymes or in dense lateral clusters **JUNCACEAE**

