**Key H: Perianth NOT Clearly Differentiated into Calyx and Corolla**

1. Ovary inferior or partially inferior.....................................................................................2

Ovary superior.................................................................................................................11

1. Flowers in heads subtended by an involucre of bracts.....................................................3

Flowers **NOT** as above.......................................................................................................5

1. Anthers united into a tube around the style.........................................**Asteraceae** (Aster)

Anthers distinct..................................................................................................................4

1. Flowers perfect....................................................................**Nyctaginaceae** (Four-O-Clock)

Flowers unisexual..................................................................................**Asteraceae** (Aster)

1. Leaves opposite or whorled...............................................................................................6

Leaves alternate or basal..................................................................................................7

1. Leaves opposite, **NOT** in whorls..........................................**Nyctaginaceae** (Four-O-Clock)

Leaves whorled...................................................................................**Rubiaceae** (Madder)

1. Perianth regular or only slightly irregular..........................................................................8

Perianth strongly irregular, tubular.........................................**Aristolochiaceae** (Pipevine)

1. Perianth segments (tepals)................................................................................................9

Perianth segments (petals)......................................................................**Apiaceae** (Carrot)

1. Stamens 3, sometimes with united stamens...............................................**Iridaceae** (Iris)

Stamens 6........................................................................................................................10

1. Flowers solitary or in umbels........................................................................**Liliaceae** (Lily)

Flowers in rachemes.............................................................................**Agavaceae** (Agave)

1. Leaves opposite, or whorled (part may be basal)............................................................12

Leaves alternate or basal.................................................................................................15

1. Leaves palmately compound with 3 toothed or lobed leaflets.....................................................................................**Ranunculaceae** (Buttercup)

Leaves simple, entire or subentire..................................................................................13

1. Ovary tightly enclosed by perianth tube.............................**Nyctaginaceae** (Four-O-Clock)

NOT as above...................................................................................................................14

1. Stipules present..........................................................................**Aizoaceae** (Sea Purslane)

Stipules **NOT** present.............................................................**Amaranthaceae** (Amaranth)

1. Leaves palmately compound with 3 toothed or lobed leaflets......................................................................................**Ranunculaceae** (Buttercup)

Leaves simple, entire (or sometimes toothed or basal)...................................................16

1. Stipules united to forma tubular sheath..................................**Polygonaceae** (Buckwheat)

Stipules **NOT** as above......................................................................................................17

1. Flowers unisexual.............................................................................................................18

Flowers all perfect (or part of them unisexual)...............................................................21

1. Perianth lacking in female flowers; fruits enclosed by a pair of thick or hardened bract.........................................................................................**Chenopodiaceae** (Pigweed)

Perianth present in both male and female flowers..........................................................19

1. Leaves toothed or lobed................................................................**Euphorbiaceae** (Spurge)

Leaves entire....................................................................................................................20

1. Flowers in dense clusters; fruits 1 seeded..............................**Amaranthaceae** (Amaranth)

Flowers few or solitary; fruits with several seeds..........................**Euphorbiaceae** (Spurge)

1. Leaves variously toothed or lobed; tepals 1 – 5.......................**Chenopodiaceae** (Pigweed)

Leaves entire....................................................................................................................22

1. Flowers in racemes.................................................................**Phytolaccaceae** (Pokeberry)

Leaves **NOT** in racemes....................................................................................................23

1. Tepals usually 4 – 5...........................................................................................................24

Tepals 6.............................................................................................................................26

1. Tepals 4; flowers polygamous................................................................**Urticaceae** (Nettle)

Tepals 5 (rarely 4); flowers perfect...................................................................................25

1. Fruits 1 – seeded......................................................................**Chenopodiaceae** (Pigweed)

Fruits several seeded..............................................................**Amaranthaceae** (Amaranth)

1. Leaves white beneath; stamens 9............................................**Polygonaceae** (Buckwheat)

Leaves green on both sides...............................................................................................27

1. Tepals petal-like.............................................................................................**Liliaceae** (Lily)

Tepals scale-like......................................................................................**Juncaceae** (Rush)