



BugWise

Web2Spider

Supplement



nature culture discover



Scope of the document:

The *BugWise Web2Spider Supplement* has been prepared to provide brief answers to some of the many enquiries about the spiders that make the webs encountered by users of the *Web2Spider* method. The included spiders are those which most commonly make these web types in the Sydney and Hunter regions of eastern Australia. Many of these species, or their close relatives, will be found across much of southern Australia. In general, however, this list will become less accurate as one gets further from Sydney and in particular, into tropical areas.

If you wish to comment on *Web2Spider* or this *Supplement* please visit our site at www.bugwise.net.au and either email us or post a comment on the forum.

On the website, you will also find detailed information about spiders and their role in the environment via links on the BugWise resources page.

Happy Hunting!
The BugWise Team

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We thank Mike Gray for advice during the preparation of this document. Funding for the BugWise project and associated resources was supplied by Coal and Allied Community Trust and NSW Environmental Trust.

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Spiders around the Sydney and Hunter region that commonly make the web types found in the *Web2Spider* guide

Generic names in "" signifies that these species are misplaced in this genus and will be transferred when taxonomic revisions have been completed. The abbreviation 'sp.' is species singular and 'spp.' is the plural. The notes that accompany each web-type often include details about the spiders' behaviour and this may help identify the spider in some cases.

Orb Webs

Most orb webs have glue-coated sticky silk in the catching part of the web (but see W3 and W15). The silk used for barrier webs or support lines is not sticky. Except where noted most of these orb-web building spiders are usually positioned at the hub of their web by day with the head pointing downwards (or down slope for angled webs).

Decorated orbs

There are several theories as to the purpose of decorations. In some cases it is clearly used for camouflage, e.g. some *Cylosa* spp., and decorations that involve the remains of food items may attract more potential prey such as flies. The silk decorations of some species have been shown to reflect strongly in the UV part of the spectrum and this may also attract insects. These decorations may also protect the spider by making it look larger or by deterring attacks from birds, which do not like getting covered in sticky, thick web. Decorations may also save the web from accidental damage by large animals by increasing the visibility of the otherwise difficult to see web structure.



W1. *Argiope keyserlingi*



W2. *Argiope protensa*; "*Araneus*" *bradleyi*

W1. Araneidae: *Argiope keyserlingi* and some other *Argiope* species. *A.*

keyserlingi is the common St Andrews cross spider. Many *Argiope* spp. typically rest with the front and rear legs paired up, thereby forming an X. See also W5.

W2. Araneidae: "*Araneus*" *eburnus* and "*A.*" *bradleyi*, the latter sometimes called the enamelled spider. Could also be *Argiope protensa*—although the decoration may be vague.

W3. Uloboridae: *Zosis* and other genera. Webs are made from combed rather than sticky silk. Common examples of these spiders are found in softly tensioned orb webs or semi-communal orb-web clusters around houses. Webs are often messy, sometimes with partially destroyed old webs still attached.



W3. *Zosis geniculatus*

W4. Araneidae: *Cyclosa* spp. The spider is camouflaged at the web hub. The line of debris and egg sacs may extend both directions from the spider in the middle or may end at the spider.



W4. *Cyclosa* sp. (debris on left, spider middle, egg sacs plus debris right)



W5. *Argiope keyserlingi* juvenile

W5. Araneidae: *Argiope keyserlingi* juveniles and some other *Argiope* species. Young *A. keyserlingi* switch from making a doily to an X (W1) at a leg-span of about 1 cm.

W6. Araneidae: *Cyclosa* spp. The spider is camouflaged at the web hub and



W6. *Cyclosa* sp.

may have the head upwards, sideways or diagonally. We do not yet know enough about these species to know how characteristic the shape of the decoration is for different species. Some species attach their egg sacs to twigs nearby.

W7. Araneidae: *Cyclosa* sp. This may be a variant of web form W4 or W6: more research is needed on this genus.



W8. *A. minax*, normal colour form (left) and melanic (black) form

W8. Araneidae:

Austracantha minax.

Several common names: 6-spined spider, spiny spider, jewel spider, Christmas spider. Typical coloration is black, white and yellow, but colour varies through to fully black. Spiders often form colonies.

Missing Sector and Offset orbs

W9. Araneidae: *Phonognatha graeffei* and other *Phonognatha* spp., leaf-curling spiders. Spiders sometimes use objects other than leaves for their retreat such as a snail shell or small piece of paper. The spider hides in its leaf during day; head down with legs often protruding from the entrance of the retreat. See also W13.



W9. *Phonognatha graeffei*

W10. Araneidae: "*Araneus*" *dimidiatus*, leaf curling spider. Like *Phonognatha*, these spiders always hide in their curled leaf during the day. They may be very common in early to mid summer, but by late summer and autumn the larger-growing *Phonognatha* species are far more prevalent.

W11. Nephilidae. *Nephila plumipes* and *N. edulis*. They are the familiar golden orb spiders. Webs attract attention in late summer when they get very large, and several spiders may be adjacent. Small males and tiny theridiid kleptoparasites also may be in the same web.



W11. *Nephila plumipes*



W12. *Arachnura higginsi*

W12. Araneidae: *Arachnura higginsi*, scorpion-tailed spider. Large juvenile females may be brightly coloured with yellow and red, but at maturity become fawn-cream colour which matches with the debris and egg sacs they later add through the missing sector of the web. Several webs are often in the same area.

W13. Araneidae: *Phonognatha graeffei*, leaf-curling spider. Young leaf-curling spiders are not strong enough to curl a dead leaf, so more often use a living leaf still attached to a plant or sometimes just a cone of silk. The web form slowly morphs into the adult shape of W9.



W13. *Phonognatha graeffei* juvenile

W14. Araneidae: "*Metepeira*" sp., signal-line spider. The spider hides in a retreat away from the web centre. If prey arrives in the web the spider is alerted by vibrations along its signal line, which leads into the retreat from the web centre.



W14. "*Metepeira*" sp.

W15. Uloboridae: *Philoponella* spp. and other uloborid genera. Webs are made from combed rather than sticky silk. Spiders are usually near the web hub by day but may look like a piece of debris. The resting pose is characteristic with front legs folded under.



W15. *Philoponella* sp.

Plain orbs

W16. Nephilidae. *Nephila plumipes* and *N. edulis*. These are young juveniles of the golden orb spiders and may be very common in spring and summer. The catching surface of the orb can be difficult to spot in the tangle of barrier lines. The web form is slowly changed to the adult shape.



W16. *Nephila* sp. juvenile



W17. *Neoscona* sp.

W17. Araneidae: Juveniles of many orb web spiders make this web form, even though adults may remove the hub. These include "*Lipocrea*" spp., *Neoscona theisi*, and *Eriophora* spp. In addition many of the spiders that typically make decorated webs, e.g. *Argiope* spp. juveniles and *Cyclosa* spp. may also make complete, undecorated orbs.

Signal line weavers "*Metepeira*", occasionally make an entire web if the retreat is away from the plane of the web so that the signal line does not interfere with the catching spirals.

W18. Araneidae: *Eriophora* spp; plus other araneids, see W17; Tetragnathidae: *Tetragnatha* spp. *Leucauge* sp. The tetragnathids characteristically make a sloping or horizontal web, but occasionally make one almost upright. See W19 for these spiders (NB their webs are often associated with a tangle too). *Eriophora transmarina* and *E. biapicata* are commonly called garden orb spiders. Adults of these species make the characteristic, vertical, huge, wheel-like webs, often seen in mid and late summer. Another common species, *E. heroine*, makes slightly smaller webs, usually



W18. *Eriophora* sp. ventral view



W19. *Tetragnatha* sp. (left); *Leucauge* sp.

lower down in the understory or in shrubby vegetation. Spiders hide away from the web by day and remake the web in the evening.

they are in a web by day then they have the head up-slope, otherwise they often hide with legs stretched along a twig. *Tetragnatha demissa* is common in areas of dead twigs; other *Tetragnatha* spp. are often found in webs above water or marshy areas. The abdomen of *Leucauge* is silver with black and yellow; these spiders are always in their web during the day, head down-slope.

W19. Tetragnathidae: *Tetragnatha* spp., *Leucauge* sp. *Tetragnatha* are the long-jawed spiders. They have elongate jaws, body and legs. If

W20. Theridiosomatidae. Sometimes called ray spiders. The spider holds the web in a cone under tension, releasing it suddenly to entangle suitable prey.

Other webs

Lace webs

Lace webs are made by spiders in the family Desidae. Like uloborid webs, lace webs are made from combed silk, so webs entangle prey by being fuzzy (like fluffed-out knitting wool), rather than sticky. Other names for this silk type are hackled silk or cribellate silk.

W21. Desidae: *Badumna longinqua*, *B. insignis*, black house spider, or window spider. Both species are commonly found on the outsides of human



W21. *Badumna* sp.



W22. *Paramatachia* sp.

dwellings, a characteristic “funnel-like” entrance leads to the spider in its retreat.

W22. Desidae: *Paramatachia* spp. These spiders live in a retreat in a hole in the end or side of a dead twig. Quite elongate spiders, they cannot usually turn around inside their retreats so they must wriggle in

backwards.

W23. Desidae: *Badumna* spp. These may be the same as W21 or related species, but the webs are made in a different structure situation.

W24. Desidae: *Phryganoporus candidus*. Sometimes these spiders are solitary but often they are communal. This is one of the few spider species where individuals cooperatively share a web and nest. Some caterpillars make superficially similar nests and webbing.



W24. *Phryganoporus candidus*

Sheet & knockdown webs

W25. Theridiidae: *Achaearanea mundula*, related species and probably other genera (see also W30, W32). The spiders occupy their web by day, usually resting above the sheet unless the sheet itself is pulled up, in which case it may live underneath. The spider often shelters in a retreat made from a dead leaf or other debris. They usually move around upside-down, hanging from their lines.



W25. *Achaearanea* sp.

W26. Araneidae: *Cyrtophora* spp. Tent web spiders. The sheet is a modified horizontal orb web. There is no sticky silk, just an extended hub, held up by a “tent” of vertical lines. In northern Australia adults of *C. moluccensis* may live in colonies of individual webs suspended on communal lines. Southern species may be colonial when young, but adults are usually solitary. The spider lives above the sheet, often with vegetation or a dead leaf forming a retreat.

W27. Linyphiidae. They are commonly called money spiders. These small spiders live among lines above or below the sheet. Those that live below catch prey that lands or falls on the sheet by biting through.

W28. Stiphidiidae: *Corasoides australis*, the platform web spider. The spider lives in a burrow from which the platform opens out. Spiders run on the top of the sheet, and will emerge to capture prey falling or landing on the sheet. A fine



W26. *Cyrtophora* sp.



W28. *Corasoides australis*



W29. *Jamberoo* sp.

knockdown web above helps disorient flying prey as well as warning the spider in its burrow.

W29. Stiphidiidae: species in the genera *Therlinya*, *Pillara*, *Couranga* and *Jamberoo* (last two names in press 2008). Also Theridiidae: *Steatoda* spp. These spiders' retreat

burrows open on the underside of the sheet, on which they run upside down. Retreats may be shallow burrows or crevices in earth banks, in rotting wood or under bark. *Therlinya* have a plain amber-brown carapace, the other stiphidiid genera all have longitudinal dark stripes and can only be told apart using a microscope. *Steatoda* webs in certain situations can look similar to stiphidiid webs, but usually the silk is stiffer and the retreat is well tucked

away so the entrance is not obvious. *Steatoda* webs more typically fit category W31 or W32.

W29a. Stiphidiidae: *Stiphidion facetum*. Spiders live against the substrate in the base of the silk funnel. Their appearance is similar to *Jamberoo* sp. (see W29) but the eyes are in a V shape. Male spiders have extremely long front legs.



W29a. *Stiphidion facetum*

Tangle webs

Tangle webs are typically made by spiders of the family Theridiidae, but tangles may also form an integral part of the webs of spiders in other families, e.g. the barrier webs of *Nephila*, knockdown webs of *Corasoides*, or the retreat area of "*Metepeira*". Theridiid tangle webs are often a mixture of dry silk and sticky silk lines. In some webs the droplets of glue on sticky lines are regularly spaced and can be seen quite easily without extra magnification.

W30. Theridiidae: *Achaearanea* spp., *Theridion* spp. plus others. This part of the family Theridiidae requires revision in Australia. At present many species are placed in the wrong genus, making it difficult to assign a particular web type to any one group of spiders. The spider is usually present in or near its retreat, upside-down in the web.



W30. *Achaearanea* sp.



W31. *Latrodectus hasseltii*

W31. Theridiidae: *Latrodectus* spp, *Achaearanea* spp. *Steatoda* spp. This web type is typified by the Redback spider, *Latrodectus hasseltii*. The retreat may be of thickly tangled silk and often contains egg sacs, as well as the spider, which hangs upside-down. The long lines are the catching points—crawling animals get stuck to the sticky droplets that are near the end of the long lines. These lines have a weak point just above the substrate, so the line breaks and the elasticity takes the prey up towards the spider. Small prey, such as ants, can get held by a single line. Sometimes larger animals such as lizards or snakes get caught when they come into contact with many lines.



W32. *Theridion* sp.

W32. Theridiidae: *Achaearanea*, *Theridion*, other theridiid genera. Also egg sac webs of spiders such as *Tetragnatha* spp (Tetragnathidae) and partial webs of other spiders. These webs may be catching webs in their own right, or they may indicate the presence of another kind of spider that has temporarily taken down its catching web, or makes no catching web. Theridiids will usually be present in a catching web.