## Identification of Pocadicnemis pumila and Pocadicnemis juncea.

These two closely related linyphiids are both relatively common, the former throughout the country but more frequently in northern Britain and the latter almost confined to the southern half of our islands. Distinguishing them, and particularly females, can prove difficult and requires that the specimens are carefully positioned so that the important features of the female epigynes and male palps can be clearly seen.

# Morphology

Males of the two species are best distinguished by the form of the median apophysis (M) which is most clearly seen when the palp is viewed from a distal position. In *Pocadicnemis pumila*, the median apophysis is only gently curved and tapers rather rapidly to a point (Fig. 1B). By contrast, the median apophysis of *P. juncea* is strongly curved and tapers much more gradually to a fine point (Fig. 2B).

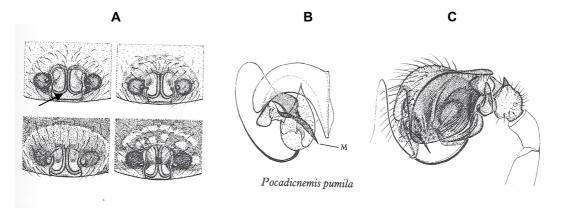


Figure 1. Genitalia of *Pocadicnemis pumila*. A. Epigynes viewed ventrally, B. Palp viewed distally, C. Palp viewed retrolaterally. M = median apophysis.

Females of the two species are more difficult to separate and the epigynes are somewhat variable in appearance. In both species the epigyne projects ventrally from the underside of the abdomen. This means that a very small change in viewing angle can produce quite a large change in the appearance of the structures, something that should always be borne in mind. An important difference between the two species is usually in the area posterior to the curved ducts that run parallel to each other in a central position. In *Pocadicnemus pumila*, the ducts extend much further towards the posterior margin of the epigyne, so that there is very little space between them and the hind margin and this space appears as a narrow transverse strip (Fig. 1A, area behind ducts arrowed).

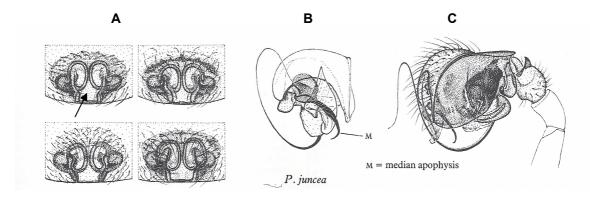


Figure 2. Genitalia of *Pocadicnemis juncea*. A. Epigynes viewed ventrally, B. Palp viewed distally, C. Palp viewed retrolaterally.

In *P. juncea*, the ducts do not extend as far posteriorly so that the space behind the curved ducts is distinctly greater and appears more nearly rectangular (Fig. 2A). However, as the figures show, the variability in the epigyne of both species means that on occasion it is difficult

to assign isolated specimens to one or the other with absolute certainty. The epigyne may also sink into the abdomen, reducing the apparent distance between the epigynal fold and the posterior edge of the sperm ducts (Dobson, 1992).

An additional supporting character can be seen in the sperm ducts which form a pair of loops. In *P. pumila* the width across the anterior pair of loops is typically less than or equal to the width across the posterior pair of loops, whereas in *P. juncea* these are wider anteriorly.

### **Habitats**

Pocadicnemis pumila can be commonly found in moorland, grassland and bogs in the North of Britain but is rather more restricted in its habitats in the South. Harvey (2012) notes that in Essex, it is restricted to wet heath in the Epping Forest area and rides in damp boulder clay woodlands in the north-west of the county. In Kent, it is also most frequent on heathland and in ancient woodland although it has been collected on sand dunes at Sandwich Bay as well.

By contrast, *Pocadicnemis juncea* occurs in a broad range of open habitats throughout its range. These include various grasslands, open woodlands, wetlands (marshes, fens), maritime communities (sand dunes, salt marshes, shingle) as well as many man-modified habitats such as gardens, road verges and post-industrial sites. While the impression is that this species is adapted to a wider range of habitats where it overlaps with *P. pumila*, caution is needed in interpreting the available data due to the possible confusion of the females of the two species. Identification of *P. pumila* relying only on females from unusual habitats, especially in the south-east, should be confirmed by males.

#### **Acknowledgements**

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#### Reference

Dobson, S. 1992. Separation of females of *Pocadicnemis pumila* (Blackwall) and *P. juncea* Locket & Millidge. *Spider Recording Scheme News* **16**: 2.

Harvey, P. *Pocadicnemis pumila* Summary In: The spider recording scheme website. 2012. http://srs.britishspiders.org.uk/portal.php/p/Summary/s/Pocadicnemis+pumila+sens.+str.

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