



Family Ameletopsidae

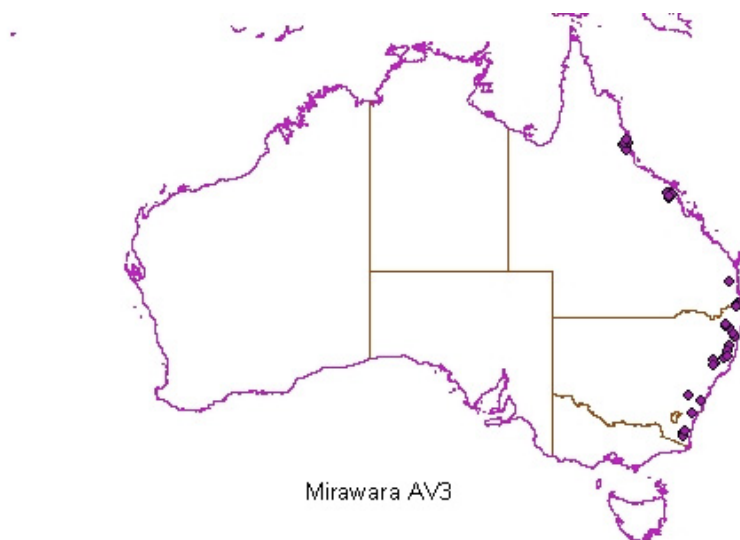
Habitat Profile for *Mirawara* sp 3

Mirawara sp 3 differs from the other two species by the markings on the head and labrum. It is a widely distributed species occurring along the east coast of Australia from southern New South Wales to the wet tropics in Queensland. The distribution of the three species together is similar to that given by Campbell (1981). Specimens from near the Lamington National Park (the type locality of *M. megaloprepia*) were all *Mirawara* sp 3, but until direct associations between nymphs and adults are made the nymphs remain designated as sp 3.

Mirawara sp 3 has wide range of habitat conditions as expected with such a wide distribution. The nymphs were collected from edge and riffle samples ranging from slow to fast flowing waters in streams at low to high altitude (40-1000m) Chart a) and generally within 50km of the source (Chart b). Substrate was dominated by cobbles with >10% detrital cover (Chart c). Streams varied between 2-17m in width (Chart d) and were generally shallow (<0.5m depth) (Chart e). The pH was near neutral and turbidity, alkalinity (Chart f) and conductivity (Chart g) were all low.

The following generalities can be made about the other parameters listed in the Table: recorded water temperature between 10.7-19.6 °C, pH mostly in range of 6.8-8.2 and low turbidity of <40 NTU.

Mean, median and range for selected physical and chemical parameters and habitat categories are given in the Table.



Distribution of *Mirawara* sp 3 in Australia.

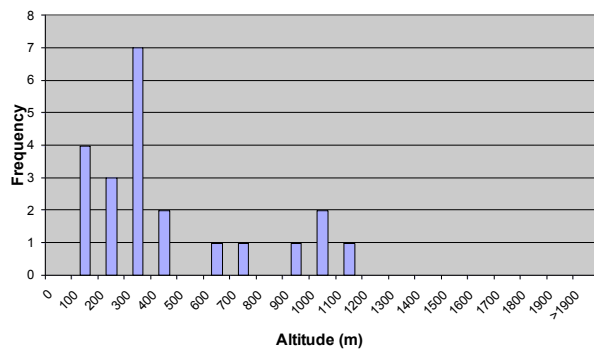


Mirawara AV3, nymph, head and typical habitat

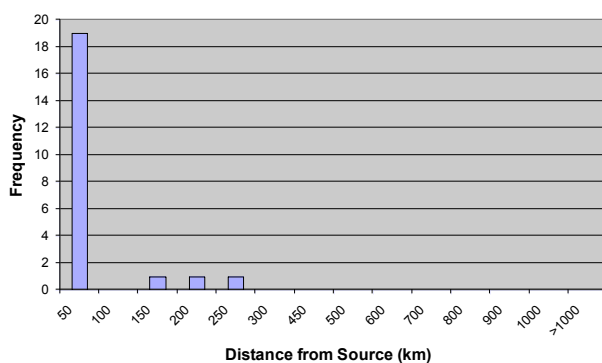


Charts for *Mirawara* AV3

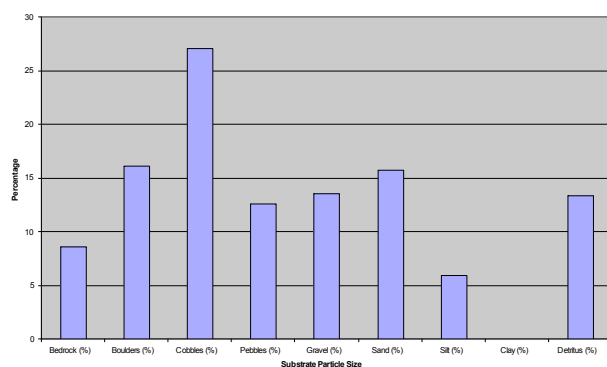
a) Altitude



b) Distance from source

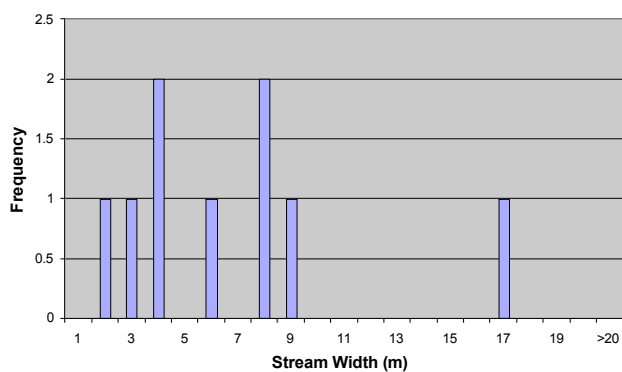


c) Substrate Particle Size

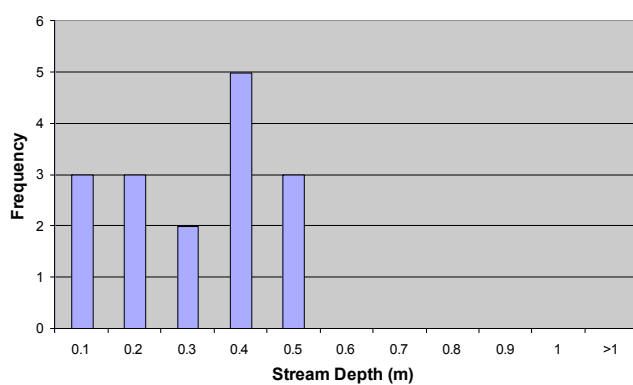




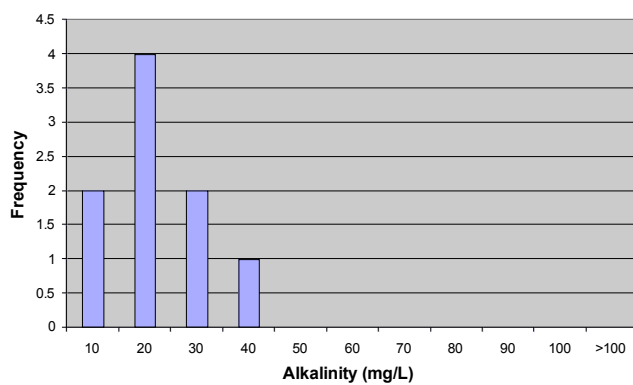
d) Stream Width



f) Depth



g) Alkalinity



h) Conductivity

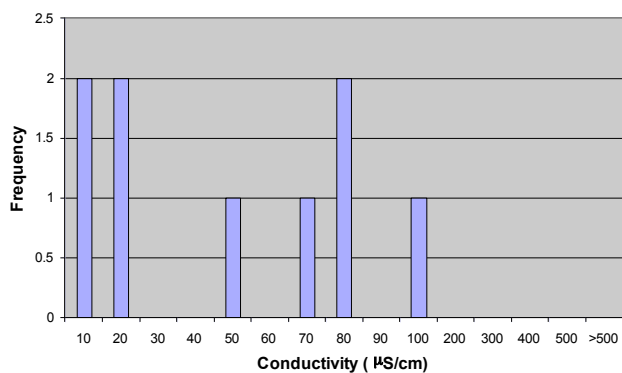




Table. Mean and median physical and chemical parameters for *Mirawara sp3*.

	Mean	Median	Range	n
Altitude (m)	355	220	40-100	22
Distance from source (km)	35.6	13.9	4.6-223	22
Width (m)	6.7	6	2-17	9
Depth (m)	0.3	0.3	0.03-0.5	16
Water Temperature	14.9	14.2	10.7-19.6	9
Conductivity (µS/cm)	45	44	9-92	9
pH	7.4	7.3	6.8-8.2	9
Turbidity (NTU)	8.0	4.1	0.6-39.4	9
Oxidised Nitrogen (mg/L)	0.028	0.010	0.010-0.090	9
Total N (mg/L)				
Total P (mg/L)	0.014	0.010	0.010-0.046	9
Alkalinity (mg/L)	17.7	18	10-36	9

References

Campbell IC (1981) Biogeography of some rheophilous aquatic insects in the Australian region. *Aquatic Insects* **3**, 33-43.