



Family Ameletopsidae

Habitat Profile for *Mirawara AV2*

Mirawara AV2 was recorded from only 12 sites in Victoria and New South Wales. Unlike *Mirawara AV1*, *Mirawara AV2* was collected mainly from edge and sweep samples in slow flowing waters from streams at altitudes from 220 to 1700m (Chart a) and ranged from 2 to 40km from their source (Chart b). The substrate was dominated by boulders and cobbles, but sand was also well represented above 10% cover and detritus cover was low usually less than 5% (Chart c). The streams were small, less than 15m wide (Chart d) and depth was usually <0.4m (Chart e). The streams had an alkaline pH, were low in turbidity, alkalinity (Chart f) and conductivity (Chart g).

Mirawara AVsp2 can be distinguished from *Mirawara AV1* by the broad white patches on the labrum and beside the eyes, and is probably *Mirawara purpurea* Riek, but again association with the adults has not been possible during this study.

The following generalities can be made about the other parameters listed in the Table: recorded water temperature between 4.5-14.9 °C, pH mostly in range of 6.7-13 and low turbidity of <4 NTU.

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



Distribution of *Mirawara AV2* in Australia.

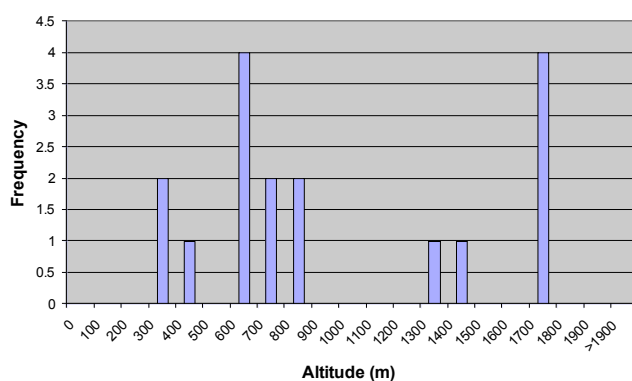


Mirawara AV2, nymph, head and typical habitat

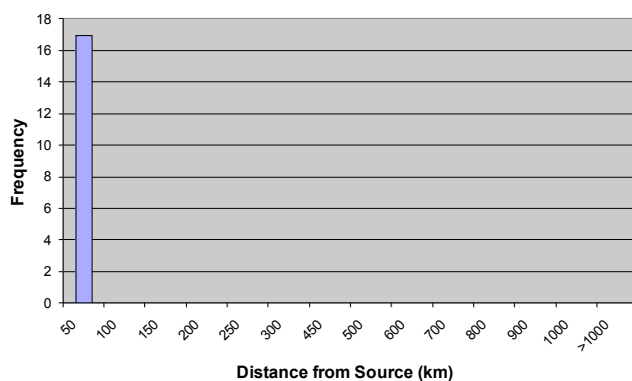


Charts for *Mirawara* AV2

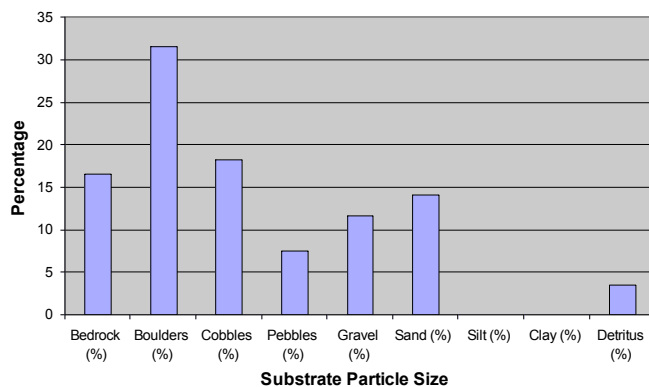
a) Altitude



b) Distance from source

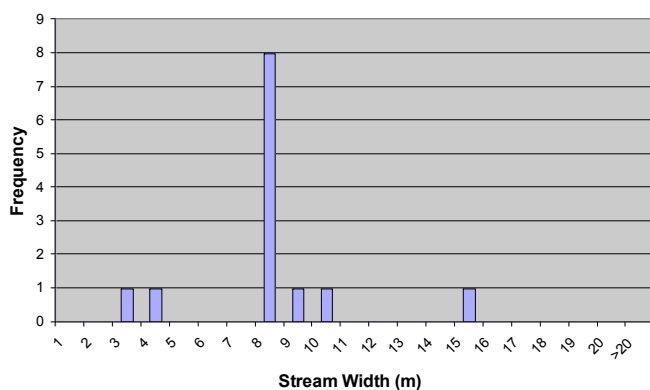


c) Substrate Particle Size

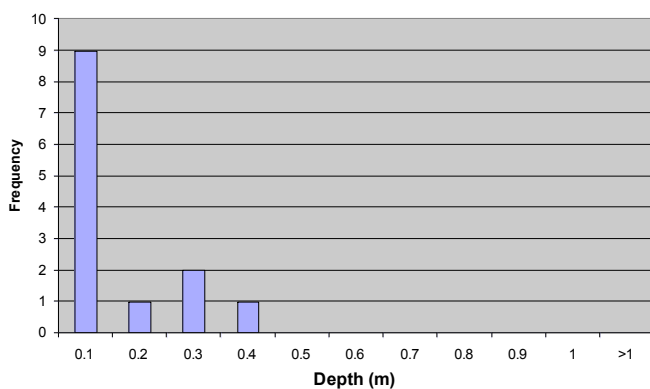




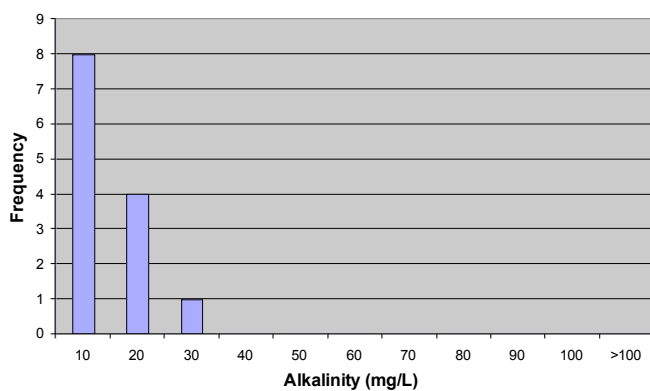
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

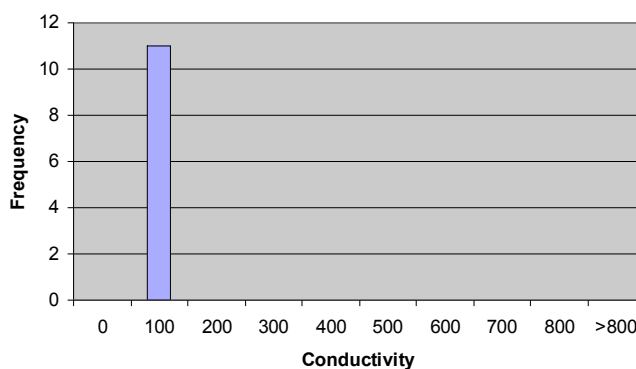




Table. Mean and median physical and chemical parameters for *Mirawara AV2*.

| | Mean | Median | Range | n |
|--|-------|--------|-------------|----|
| Altitude (m) | 888 | 680 | 220-1700 | 17 |
| Distance from source (km) | 16.9 | 16.8 | 2-39 | 17 |
| Width (m) | 7.7 | 7.7 | 3-15 | 13 |
| Depth (m) | 0.2 | 0.07 | 0.02-1.2 | 13 |
| Water Temperature | 10.6 | 10 | 4.5-14.9 | 13 |
| Conductivity ($\mu\text{S}/\text{cm}$) | 21.5 | 20 | 3.4-38 | 11 |
| pH | 9.2 | 9.0 | 6.7-13 | 13 |
| Turbidity (NTU) | 1.4 | 1.2 | 0-3.1 | 13 |
| Oxidised Nitrogen (mg/L) | 0.015 | 0.010 | 0.002-0.071 | 13 |
| Total N (mg/L) | | | | |
| Total P (mg/L) | 0.010 | 0.010 | 0-0.021 | 13 |
| Alkalinity (mg/L) | 12.1 | 10 | 6-29.5 | 13 |