



Family Teloganodidae

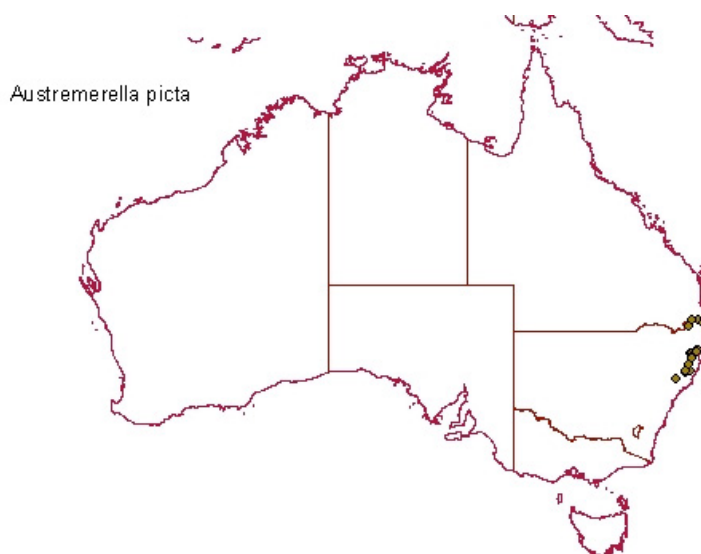
Habitat Profile for *Austremerella picta* Riek

Austremerella picta was recorded from 23 locations in New South Wales and Queensland. This species was restricted to the north east coastal region of NSW north of Newcastle from the Hunter River Catchment to the south east coastal region of Queensland in the Currumbin Creek Catchment at Mt Cougal National Park. Riek (1963) described this species from the Lamington National Park in southern Queensland and its distribution and ecology was described by (Chessman and Boulton 1999). The data from the National River Health program has confirmed the distribution, but also includes additional sites in Queensland.

A. picta was recorded from forested areas at a wide range of altitude from high (>800m) to lowlands (<100m) (Chart a) but <50km from the stream source (Chart b) and from edge habitat in slow flowing sections of stream but with large rocky substrate dominated by bedrock, boulders, cobbles and pebbles, but the detritus was also high, near 20% (Chart c). Chessman and Boulton (1999) recorded them in leaf litter, and this is consistent with the high percentage of detritus in the habitat. The streams usually less than 12m wide (Chart d) and <0.5m deep (Chart e). The streams were circum-neutral pH, very low in turbidity, alkalinity (Chart f) and conductivity (Chart g).

The following generalities can be made about the other parameters listed in the Table: recorded water temperature between 8.9-23.9 °C, pH mostly in range of 5.8-8.6 and low turbidity of <12 NTU.

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



Distribution of *Austremerella picta* in Australia

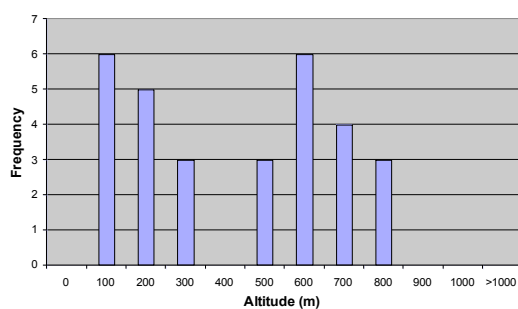


Austremerella picta nymph

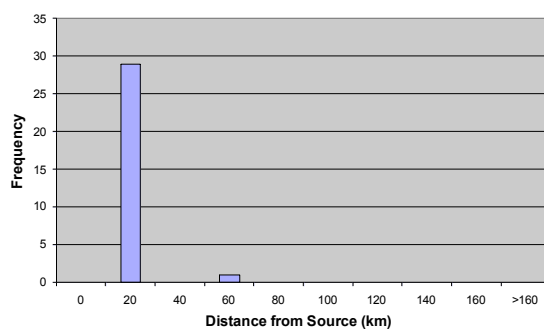


Charts for *Austremerella picta*

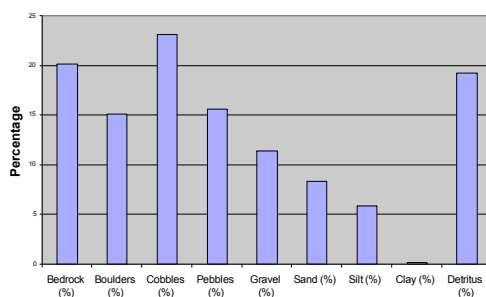
a) Altitude



b) Distance from source

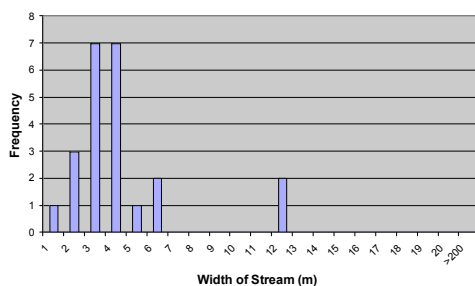


c) Substrate Particle Size

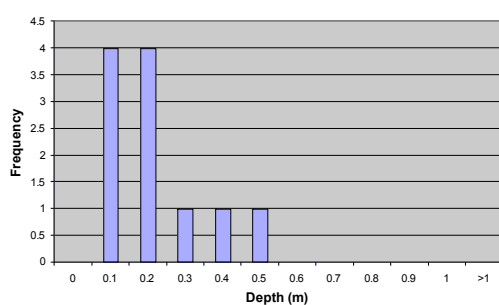




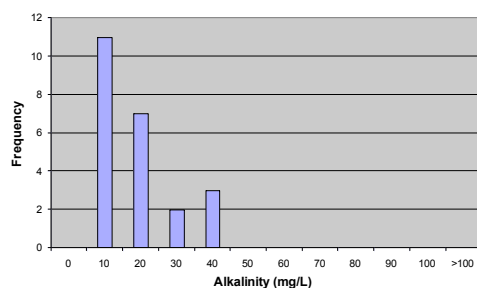
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

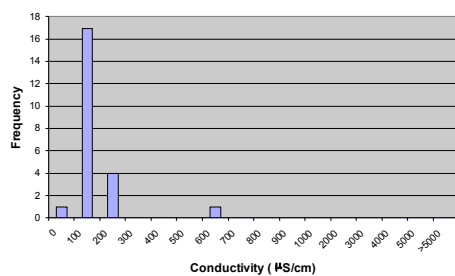




Table. Mean and median physical and chemical parameters for *Austremerella picta*.

	Mean	Median	Range	n
Altitude (m)	380	410	60-760	20
Distance from source (km)	7.9	5.3	1.2-8.6	20
Width (m)	4.2	4.0	1-12	20
Depth (m)	0.20	0.20	0.05-0.5	20
Water Temperature	14.3	13.4	8.9-23.9	26
Conductivity (µS/cm)	81	56	0-580	26
pH	7.3	7.3	5.8-8.6	26
Turbidity (NTU)	1.8	0.6	0-11.4	26
Oxidised Nitrogen (mg/L)	0.074	0.070	0.001-0.180	20
Total N (mg/L)	0.02	0	0-0.4	20
Total P (mg/L)	0.001	0.001	0.001-0.002	20
Alkalinity (mg/L)	15.9	11	10-35	26

References

Chessman BC, Boulton AJ (1999) Occurrence of the mayfly family Teloganodidae in Northern New South Wales. *Australian Journal of Entomology* **38**, 96-98.

Riek EF (1963) An Australian mayfly of the family Ephemerellidae (Ephemeroptera). *Journal of the Entomological Society of Queensland* **2**, 48-50.