



## Family Gripopterygidae

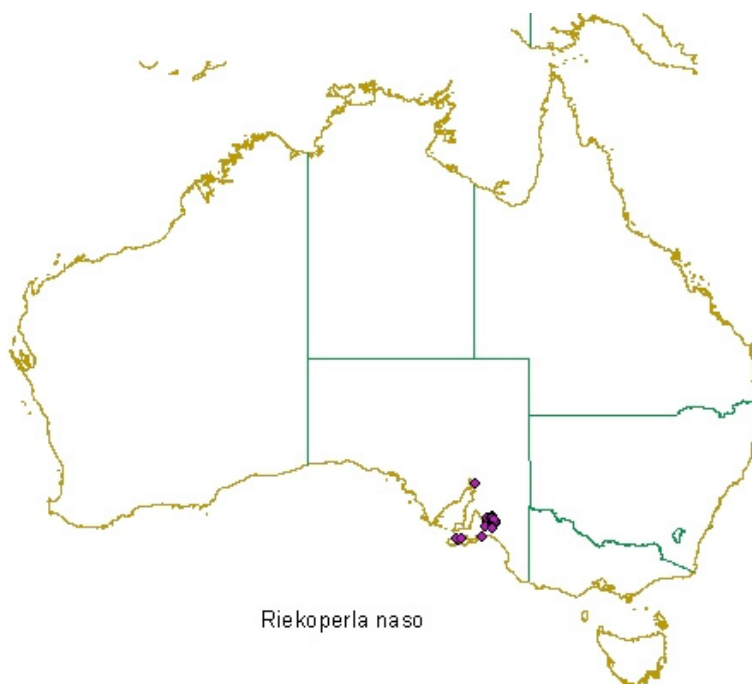
### Habitat Profile for *Riekoperla naso* Theischinger

*Riekoperla naso* Theischinger is an endemic stonefly from South Australia, and was originally described from adults from Mambray Creek in the Southern Flinders Ranges (Theischinger 1981) and it was also recorded in the Barossa Valley near Angaston. Suter and Bishop (1990) described the nymphs and recorded this species from 29 locations from the Southern Flinders Ranges to Kangaroo Island and on the Eyre Peninsula. They noted this species was found in streams that were intermittent and which dried out in summer (Suter and Bishop 1990). During this study *R. naso* was recorded from 24 samples from the Southern Flinders ranges to Kangaroo Island.

*R. naso* was recorded from streams at altitudes generally <300m above sea level (Chart a) and close to the stream source (usually <20km) (Chart b) and the substrate was dominated by sand silt and clay with >25% detrital cover (Chart c). Streams were generally <20m wide (Chart d), with moderate alkalinity (Chart e) and high conductivity between 350 $\mu$ S/cm and 13,150  $\mu$ S/cm (Chart f).

The following generalities can be made about the other parameters listed in the Table: relatively low temperature (14-19.25 °C), pH was alkaline, range 7.3-8.4 and low turbidity (<28 NTU).

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

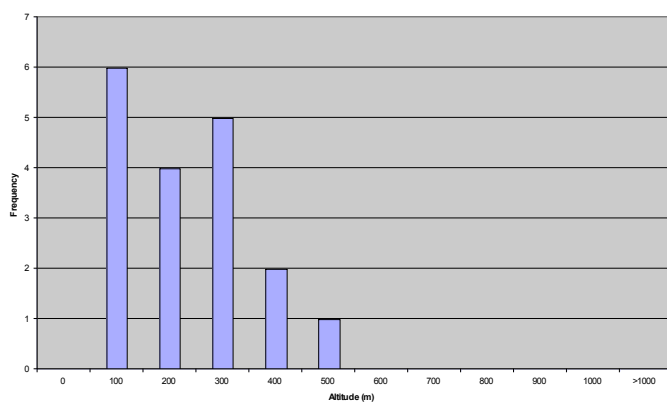


Distribution of *Riekoperla naso* in Australia.

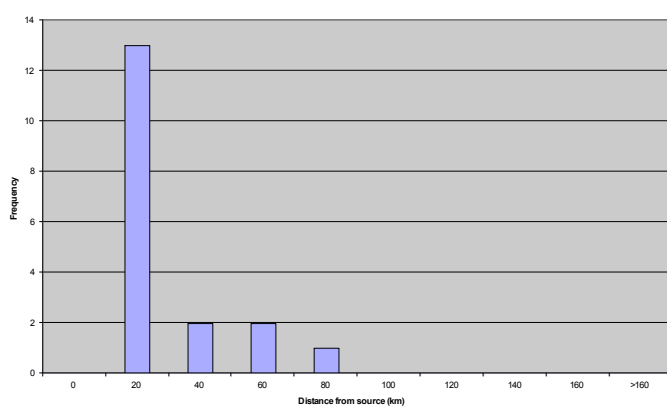


## Charts for *Riekoperla naso*

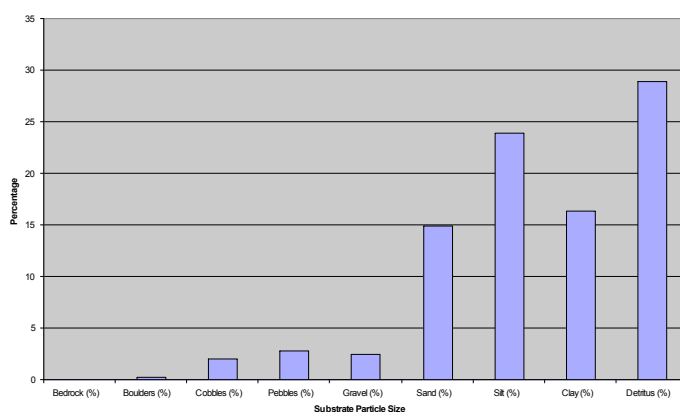
### a) Altitude



### b) Distance from source

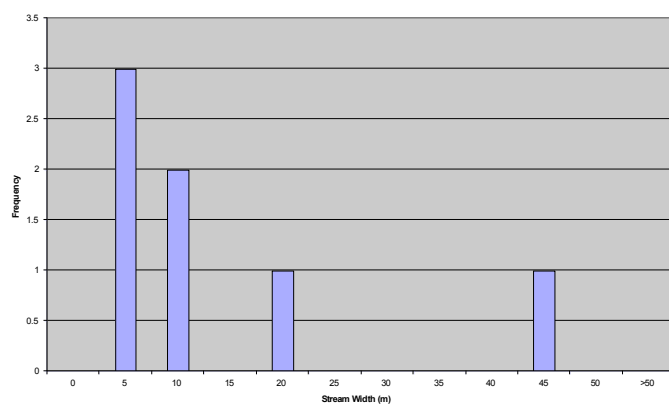


### c) Substrate Particle Size

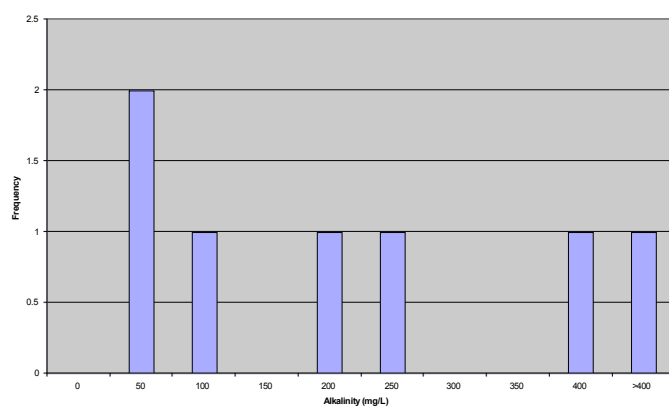




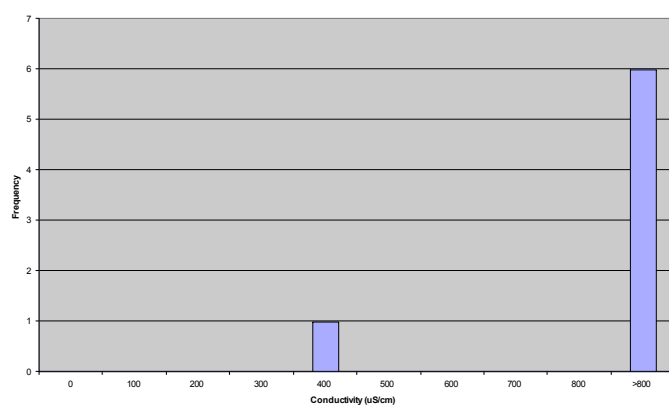
d) Stream Width



e) Alkalinity



f) Conductivity





**Table.** Mean, median and range for selected physical and chemical parameters and habitat categories for *Riekoperla naso* (N= number of records).

|                           | Mean  | Median | Range       | N  |
|---------------------------|-------|--------|-------------|----|
| Altitude (m)              | 182   | 165    | 5-445       | 18 |
| Distance from source (km) | 19.2  | 13.2   | 3.2-63      | 18 |
| Width (m)                 | 10.8  | 5.8    | 2-41        | 7  |
| Depth (m)                 |       |        |             |    |
| Water Temperature (°C)    | 16.7  | 17.1   | 14-19.2     | 7  |
| Conductivity (µS/cm)      | 4030  | 2390   | 366-13150   | 7  |
| pH                        | 7.9   | 7.9    | 7.3-8.4     | 7  |
| Turbidity (NTU)           | 10.6  | 6.5    | 2.3-28      | 7  |
| NO <sub>3</sub> -N (mg/L) | 0.026 | 0.029  | 0.005-0.042 | 7  |
| Total N (mg/L)            | 0.82  | 0.73   | 0.345-1.465 | 7  |
| Total P (mg/L)            | 0.006 | 0.005  | 0.003-0.015 | 7  |
| Alkalinity (mg/L)         | 214.2 | 180.5  | 25.5-526    | 7  |

## References

Suter PJ, Bishop JE (1990) Stoneflies (Plecoptera) of South Australia. In 'Mayflies and Stoneflies: Life Histories and Biology'. (Ed. IC Campbell) pp. 189-207. (Kluwer Academic Press: Dordrecht)

Theischinger G (1981) New and little known stoneflies from Australia (Insecta: Plecoptera). *Aquatic Insects* **3**, 103-127.