It is noticeable from Table 1 and Figure 1 that the weight in relation to total length is highly significant in both the sexes of *R. daniconius*. The correlation co-efficient (r) was 0.954 and 0.972 for male and female, respectively, which is higher than the tabulated ‘r’ value (Pauly, 1983) at n-2 degree of freedom at 1% level of probability. The calculated ‘t’ value was lower than the tabulated value at 5% probability level for both the sexes. Here, ‘b’ was 2.640 for males and 2.498 in case of females. Analysis of variance testing the regression of the length-weight relationship in the *R. daniconius* (combined sex) is shown in Table 2.

Generally, weight of the fish will be proportional to the cube of their length, based on its dimensional equality. Beverton and Holt (1957) while discussing the merits of allometric formula \(W = aL^b\) with cube formula \(W = aL^3\) stated that instance of deviations from isometric growth in adult fishes are rare. Hence, it appears advisable to test the regression coefficients against the isometric growth value of ‘3’ to find whether there is any significant deviation. The results of analysis showed that (Table 1) in case of both the sexes the ‘b’ value was significantly different from ‘3’ at 1% level. The results indicated that the length-weight relationship of both the sexes do not followed cube law. Total weight of fish may also be altered by the weight of the stomach content depending on the food of stomach content depending on the food ingested just before weighing (Muth & Smith, 1974). The divergence from the cube law may be due to certain environmental factors also. Pathak (1975) reported that the ‘b’ values less than ‘3’ in *Labeo calbasu* of Soni reservoir. Mercy et al. (2002) reported that the ‘b’ value (3.04) in *Puntius denisonii* of Bharathapuzha river system in Kerala also followed cube law. Sunil Kumar et al. (1999) opined that the exponential values for *Horabagrus brachysoma* do not significantly differ from ‘3’.

Depending on the deviation of b values from ‘3’ fishes can be classified in to three groups (a) b = 3 where the body form of fish remains constant (isometric) at different lengths (Allen, 1938) (b) b < 3 when fish becomes more slender as the length increases and (c) b > 3 when fish grows more stouter with increase of length (allometric). But the value of ‘b’ usually remains between 2.5 and 4.0 (Hile, 1936; Martin, 1949). The present value ranged between 2.498 and 2.640. Thus in the current study, weight in relation to total length in both the

### Table 1. Coefficient of length weight relationship and statistical analysis of Rasbora daniconius

<table>
<thead>
<tr>
<th>Sex</th>
<th>No of fishes</th>
<th>A</th>
<th>B</th>
<th>Y = a + b x</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>18</td>
<td>-1.310</td>
<td>2.498</td>
<td>Y = -1.310 + 2.498 x 0.972*</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>52</td>
<td>-1.329</td>
<td>2.640</td>
<td>Y = -1.329 + 2.640 x 0.954*</td>
<td></td>
</tr>
</tbody>
</table>

* Significant (P<0.01)

### Table 2. Analysis of variance testing the regression of the length-weight relationship in Rasbora daniconius

<table>
<thead>
<tr>
<th>Variables</th>
<th>DF</th>
<th>Sum of squares</th>
<th>Mean square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total length</td>
<td>Regression 1</td>
<td>2.901</td>
<td>2.901</td>
</tr>
<tr>
<td>Residual</td>
<td>88</td>
<td>0.232</td>
<td>0.002</td>
</tr>
</tbody>
</table>

F - 835.076; Significance of F - 0.000

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sexes of *R. daniconius* follow ‘allometric’ growth pattern.

**REFERENCES**


**ANCYLOSTOMIASIS IN DOHLES *CUON ALPINUS***

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The Dhole or the Indian Wild Dog (*Cuon alpinus*) is a highly social canid. Puppies are completely dependent on their mother for milk and on the rest of the pack for regurgitated food for the first few months of their lives.

A Dhole at the Arignar Anna Zoological Park, Chennai gave birth to nine pups which were well cared by the mother. Faecal samples were collected from all the nine pups using sterile cotton swabs at the age of 20 days. *Ancylostoma* eggs were observed using floatation method within two hours and eggs per gram were evaluated using modified McMaster method (Thienpont et al., 1986). Eggs were identified by their morphological structure (Soulsby, 1982).

All the pups and the mother were dewormed with pyrantel pamoate @ 5mg/kg body wt., mixing the drug in beef for the adult and manually administering the drug to the pups. Coprological examination was carried out after 15 days of administration of the drug. All pups had normal appetite but were weak with rough hair coat before the administration of pyrantel pamoate. On the day prior to administration of pyrantel pamoate, all pups had *Ancylostoma caninum* infection. On day two to day five random faecal examination revealed the presence of eggs of *A. caninum*. The hairs regained the shine in 15 days. *A. caninum* eggs decreased by 94.2% on day 15