

# Prospects for Genetic Improvement in Objective Measurements of Body Colour in Pacific Whiteleg Shrimp (*Litopenaeus Vannamei*)

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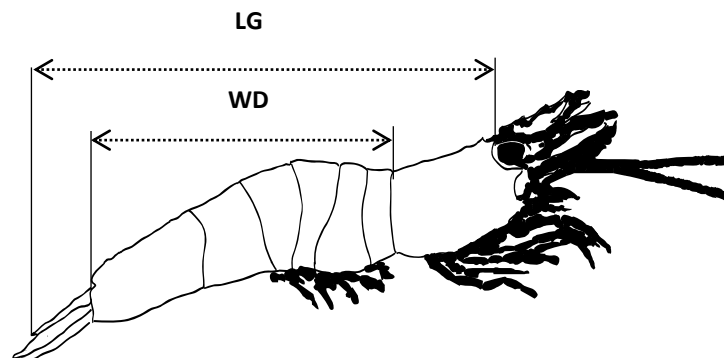
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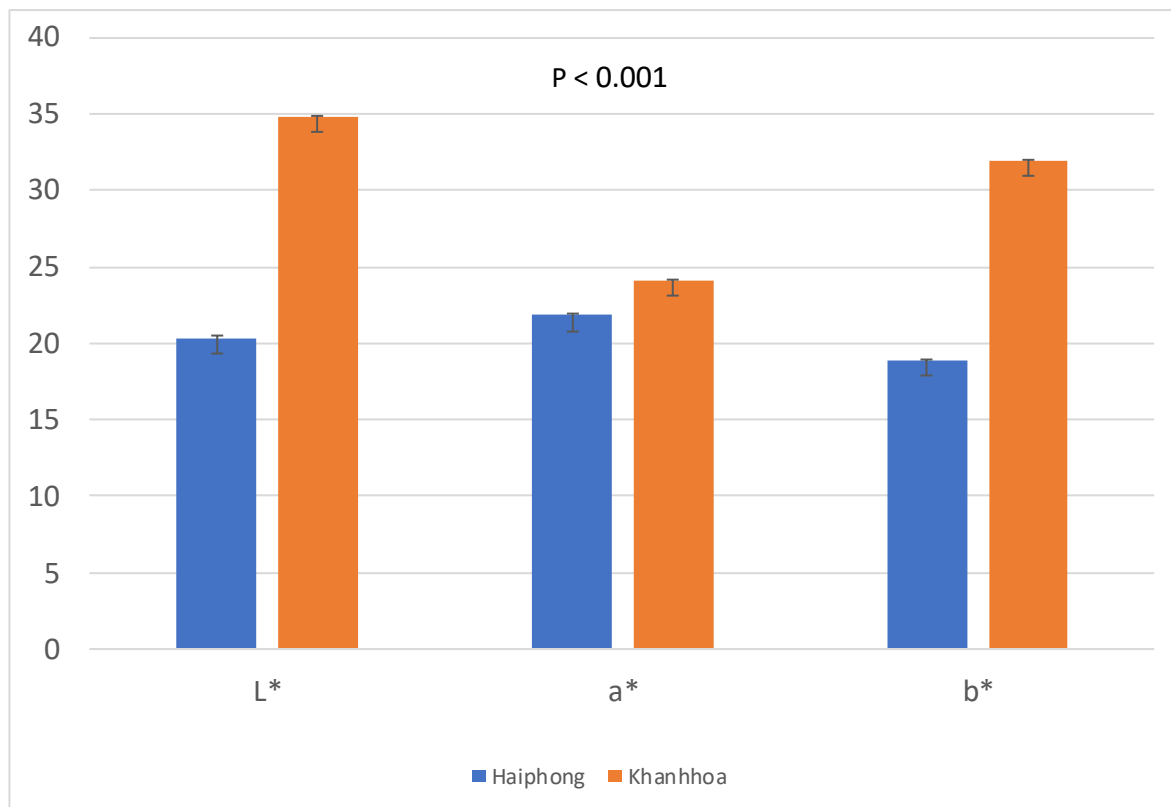
**Table S1:** Significance of fixed effects (F-statistic value)

| Traits       | Environment | Sex      | Age       |
|--------------|-------------|----------|-----------|
| Body colour  |             |          |           |
| L*           | 11499.7***  | 0        | 0.63      |
| a*           | 19.32***    | 0.75     | 1.69      |
| b*           | 546.29***   | 5.94*    | 2.82      |
| Morphometric |             |          |           |
| WT           | 1.52        | 11.17*** | 93.9***   |
| LG           |             |          |           |
|              | 198.58***   | 1.34     | 213.89*** |
| WD           | 109.07***   | 7.94**   | 35.27***  |

\*P < 0.05, \*\*P < 0.01 and \*\*\*P < 0.001, ns = non-significance



**Figure S1.** Calculation of body traits, from left to right: LG is total body length (mm, distance from eye orbit to tip of telson); WD is abdomen length (mm, distance from the hind margin of the carapace to tip of telson).



**Figure S2.** Environmental effects on body colour score of whiteleg shrimp *L. vannamei* (least square means after corrections for the fixed effects)