

**Additional File 6: Standard length of mature Midas cichlids in Apoyeque by lip morphology and sex.**

Body size, measured as standard length, did not differ between thin- and thick-lipped individuals (Two factor ANOVA, morph effect,  $F_{1,202} = 0.652$ ,  $p = 0.42$ ). Males were significantly larger than females (sex effect,  $F_{1,202} = 19.9$ ,  $p < 0.001$ ) for both morphs (morph  $\times$  sex interaction,  $F_{1,202} = 0.082$ ,  $p = 0.78$ ).

Lip morph	Sex	<i>N</i>	Mean length (cm) $\pm$ standard error
thick-lipped	♀	24	9.3 $\pm$ 1.8
thick-lipped	♂	15	10.5 $\pm$ 5.0
thin-lipped	♀	82	9.5 $\pm$ 1.1
thin-lipped	♂	85	10.8 $\pm$ 2.1