

Family	Species	Standard length (mm)	Keel length (mm)	Ratio
Dorosomatidae	<i>Amblygaster sp</i>	119.4	62.11	0.520184
Dorosomatidae	<i>Anodontosoma chacunda</i>	102.6	57.48	0.560234
Dorosomatidae	<i>Dorosoma cepedianum</i>	78.04	37.21	0.476807
Engraulidae	<i>Thryssa spinidens</i>	85.32	33.67	0.394632
Dorosomatidae	<i>Harengula jaguana</i>	58.4	32.35	0.553938
Dorosomatidae	<i>Harengula jaguana</i>	65.35	33.1	0.506503
Dorosomatidae	<i>Sardinella albella</i>	87.93	50.8	0.577732
Dorosomatidae	<i>Sardinella lemuru</i>	86.65	57.29	0.661166
Engraulidae	<i>Thryssa setirostris</i>	84.1	34.99	0.416052
Engraulidae	<i>Stolephorus chinensis</i>	63.93	11.34	0.177382
Pristigasteridae	<i>Opisthopterus tardoore</i>	96.96	41.14	0.424299
Engraulidae	<i>Setipinna tenuifilis</i>	92.26	32.57	0.353024
Sternoptychidae	<i>Sternoptychidae sp</i>	28.59	11.17	0.390696
Dorosomatidae	<i>Tenualosa thibaudeaui</i>	86.75	48.05	0.55389
Engraulidae	<i>Thryssa chefuensis</i>	35.41	11.05	0.312059
Engraulidae	<i>Thryssa chefuensis</i>	37.83	13.49	0.356595
Dorosomatidae	<i>Nematalosa come</i>	60.72	32.31	0.532115
Engraulidae	<i>Stolephorus nelsoni</i>	60.88	9.992	0.164126
Serrasalmidae	<i>Ossubtus xinguense</i>	95.06	16.83	0.177046
Serrasalmidae	<i>Serrasalmus medinaei</i>	127.9	54.92	0.429398
Serrasalmidae	<i>Metynnis hypsauchen</i>	63.42	30.23	0.476664
Serrasalmidae	<i>Myloplus rhomboidalis</i>	56.48	28.87	0.511154
Serrasalmidae	<i>Pristobrycon calmoni</i>	83.75	38.14	0.455403
Serrasalmidae	<i>Pygocentrus natterei</i>	87.94	36.88	0.419377
Serrasalmidae	<i>Metynnis luna</i>	69.58	34.19	0.491377
Serrasalmidae	<i>Serrasalmus eigenmanni</i>	86.21	37.77	0.438116
Serrasalmidae	<i>Acnodon normani</i>	61.31	10.26	0.167346

Table 1. Standard length, keel length, and ratio of reviewed specimens with ventral keels.

Family and species designation for each specimen are provided. All measurements in millimeters. Ratio of keel length divided by standard length.

Body	Flow Speed (m/s)	Response Variable	p-value
Deep	30	Thrust (N)	0.01741
Deep	30	Torque (Nm)	0.000112
Deep	20	Thrust (N)	0.2158
Deep	20	Torque (Nm)	0.005915
Deep	10	Thrust (N)	0.1384
Deep	10	Torque (Nm)	0.1202
Elongate	30	Thrust (N)	0.5226
Elongate	30	Torque (Nm)	1.21E-09
Elongate	20	Thrust (N)	0.1482
Elongate	20	Torque (Nm)	0.000311
Elongate	10	Thrust (N)	0.5667
Elongate	10	Torque (Nm)	0.5284
Medium	30	Thrust (N)	0.8245
Medium	30	Torque (Nm)	2.55E-08
Medium	20	Thrust (N)	0.9179
Medium	20	Torque (Nm)	0.2056
Medium	10	Thrust (N)	0.9745
Medium	10	Torque (Nm)	0.9412

Table 2. Parameters and p-value of ANOVAs run to test variation in performance due to keel length. Model body type, flow speed, and variable of interest of each test provided. P-values denote significance if below 0.05.