

Table 1 Material examined by comparative corresponding to *Hemibrycon* species. SL, Estándar length; C&S, Clarend and Staining

Taxon	Locality	Date	Museum acronym	Specimens number	Standard length (mm)
<i>H. divisorensis</i>	Peru, Loreto, Rio Corrientes, Río Quispe	07 Jul. 2008	MUSM 37605	1	55.7
	Peru, Puno, Sanata, Río Jarara	12 Jan. 1992	MUSM 3392	9	30.9-76.9
	Peru, Madre de Dios, Tambopata, Rajulto, Inamber	09 Aug. 2004	MUSM 25461	4	43.2-86.6
	Peru, Quispicanchi	12 Jan. 1992	AUM 26785	3	62.5-74.0
<i>H. beni</i>	Bolivia, Amazonas, Madera, Beni, Bopi, Río Yaropampa, Apa Apa	27 Nov.2008	UMSS 8857	5	25.0-61.2
	Bolivia, Amazonas, Madera, Beni, Kaka, Taipiplaya	17 Dec.2008	UMSS 8869	7	46.3-95.6
	Bolivia, Amazonas, Madera, Beni, Bopi, Río Blanco	01 Dec.2008	UMSS 8881	6	59.8-85.1
	Bolivia, Amazonas, Madera, Beni, Kaka, del Río Taipiplaya	03 Oct.2008	UMSS 8990	52	28.3-75.2
	Bolivia, Amazonas, Madera, Beni, Bopi, Puente Puri	04 Dec.2008	UMSS 8895	21	42.3-79.2
	Bolivia, Amazonas, Madera, Beni, Kaka, Río Encuentro, San Lorenzo	11 Dec.2008	UMSS 8953	2	56.0-62.3
	Bolivia, Amazonas, Madera, Beni, Kaka, Afluente Taipiplaya	13 Oct. 2009	UMSS 9812	9	30.0-75.8
	Bolivia, Amazonas, Madera, Beni, Bopi, Río Layme, Porvenir	22 Oct. 2009	UMSS 9821	6	46.0-78.6
	Bolivia, Amazonas, Madera, Beni, Bopi, Río Umeja, Imanblaya	03 Jan.1900	UMSS 9542	15	24.9-83.8
	Bolivia, Amazonas, Madera, Beni, Bopi, Río Cañamina, Villa Kora	16 Sept. 2009	UMSS 9572	24	19.9-45.5
	Bolivia, Amazonas, Madera, Beni, Bopi, Río La Banda; isquircani	16 Sept. 2009	UMSS 9582	2	59.8-92.5
	Bolivia, Amazonas, Madera, Beni, Bopi, Río Pekheñkhara, Imanblaya	16 Sept. 2009	UMSS 9585	18	33.5-82.5
	Bolivia, Amazonas, Madera, Beni, Bopi, Río Yaropampa, Apa Apa	16 Sept. 2009	UMSS 9608	21	27.6-81.5
	Bolivia, Amazonas, Madera, Beni, Kaka, Afluente Taipiplaya	13 Oct. 2009	UMSS 9792	38	25.9-75.7
Bolivia, Amazonas, Madera, Beni, Bopi, Trinidad, Pampa	18 Oct.2009	UMSS 10027	4	68.6-99.5	
Bolivia, Amazonas, Madera, Beni, Kaka, Río Naranjakata, San José	16 Oct. 2009	UMSS 10089	9	32.7-57.4	
<i>Hemibrycon</i> sp. 4	Peru, Juno, Satipo, Mashira, Río Tambo	09 Jun. 2009	MUSM 37926	8	55.8-75.9
<i>Hemibrycon</i> sp. 5	Peru, Madre de Dios, Tambopata, Rajuko, Inamber	09 Aug. 2004	MUSM 25461	6	43.5-87.4
	Peru, Madre de Dios, Río Alto Madre de Dios, Q. Culli	05 Sept. 1988	MUSM 3817	16	37.1-90.3
	Peru, Puno, Sanata, Río Tarara	12 Oct. 1992	MUSM 3392	9	32.1-77.8
	Peru, Amazonas, Condorcanqui, Cenepa, Alto Cenepa, Q. Capitán Ponce	12 Oct. 1992	MUSM 21297	4	33.0-47.2
	Peru, Loreto, Ucayali, Rashajosa A., Quebrada Norte	16 May. 1997	MUSM 15901	15	54.0-80.9
<i>Hemibrycon</i> sp.6:	Peru, Cusco, La Convención, Urubamba, Río Parotori, Q. Piriabidemi	28 May. 2009	MUSM 36126	2	60.7-79.4
	Peru, Juno, Satipo, Mashira, cuenca del Río Tambo	07 Jun. 2009	MUSM 37903	2	57.7-80.9
<i>Hemibrycon</i> sp.7	Bolivia, Chapare, Río Ibuelo-Ibuelo, cuenca Amazonas/Mamoré	31 Oct. 2008	UMSS 09144	2	35.9-45.8
	Bolivia, Amazon, R. Iquarazu-Isinuta, Mamoré; Isiboro/Iguarazu	26 Oct. 2008	UMSS 09174	7	29.7-73.0
<i>Hemibrycon</i> sp.8	Bolivia, Arroyo Popoy, Amazonas/Madeira; Beni/Alto Beni	05 Nov. 2009	UMSS 10042	3	61.7-80.2
	Bolivia, Tohomonoco, Arroyo Tacuaral, Amazonas/Madeira; Beni/Alto	11 Dec. 2008	UMSS 8939	3	55.4-61.9
	Bolivia, Arroyo Aguas Turbias, Amazonas/Madeira; Beni/Kaka	14 Oct. 2009	UMSS 09765	3	53.7-98.4
	Bolivia, Rio Colopampa, cuenca Amazonas/Madeira; Beni/Bopi	23 Oct. 2009	UMSS 9694	3	96.4-100.2
	Bolivia, R. Encuentro, San Lorenzo, Amazonas/Madeira, Beni/Kaka	11 Dec. 2008	UMSS 08952	1	74.2
	Bolivia, Inicua, Río San Andrés, cuenca Amazonas/Madeira, Beni	07 nov. 2009	UMSS 09732	4	52.5-65.6
	Bolivia, Arroyo Tucupi, Amazonas/Madeira, Beni/Cotacajes	05 Nov. 2009	UMSS 09870	13	54.8-70.7
	Bolivia, río Cotacajes, San Miguel de Huachi, Amazonas/Madeira; Beni	05 Nov. 2009	UMSS 09895	2	64.9-69.5
<i>Hemibrycon</i> sp.9	Perú, Ucayali, Atalaja, Seraliva, Quebrada Lazano, Río Mishahua	07 Nov. 2009	MUSM 35492	12	33.2-56.0
<i>Hemibrycon</i> sp.10 :	Peru, Cusco, La Convención, Megantoni, Río Parotori, Q. Piriabindeni	28 May. 2009	MUSM 36110	8	33.5-72.4
<i>Hemibrycon</i> sp.11	Peru, Perú, Cusco, La Convención, Río Parotori, Q. Piriabindeni	28 May. 2009	MUSM 36110	3	54.7-57.7
<i>Hemibrycon</i> sp.12	Peru, Cusco, La Convención, Megantoni, R.Parotori, Q. Piriabindeni	28 May. 2009	MUSM 36110	2	55.9-58.0

<i>Hemibrycon</i> sp.13	Peru, Ucayali, Atalaya, Sepahua, Quebrada La Raja	25 Jul. 2009	MUSM 35697	1	36.8
<i>Hemibrycon</i> sp.14	Peru, Puno, Sandía, Muspay, Pampa, Río Inambari	07 Jul. 1994	MUSM 6730	4	36.5-42.1
<i>Hemibrycon</i> sp.15	Peru, Huanuco, Aucayacu, José Crespo y Castillo	26 Ene. 2008	MUSM 32832	2	20.7-24.0
<i>Hemibrycon</i> sp.16	Peru, Puno, Carabaja, Ayapata, Inambari, Qda. Huaca, Huañuna	28 Oct. 2004	MUSM 26802	47	13.7-36.7
<i>Hemibrycon</i> sp.17	Peru, Cusco, La Convención, Megantoni, Río Parotori, Q.Piriabindeni	28 May. 2009	MUSM 36110	1	35.7
<i>Hemibrycon</i> sp.18	Bolivia, Amazonas, Mamore, Ichilo, Chimore Afluente Cesarsama	09 Nov. 2008	UMSS 9331	1	48.2
	Bolivia, Amazonas, Mamore, Ichilo, Río Vivora	17 Oct. 2005	UMSS 0872	11	34.6-50.4
	Bolivia, Amazonas, Mamore, Ichilo, Río L.Eñe	05 Nov. 2005	UMSS 9240	2	34.6-50.4
	Bolivia, Amazonas, Mamore, Isiboro, Chipiriri, Villa Gral Barrientos	06 Jun. 2004	UMSS 1176	1	46.1
	Bolivia, Amazonas, Mamore, Isiboro, Chipiriri, Colonia San Miguel	01 Aug. 2004	UMSS 5270	2	49.6-60.0
	Bolivia, Amazonas, Madera, Beni, Cotacajes, Tucupí	5 Dec. 2008	UMSS 8904	10	48.5-69.1
	Bolivia, Amazonas/Mamore; Isiboro/Chipiriri	09 Jul. 2006	UMSS 3469	8	28.7-59.5
	Bolivia, Amazonas, Madera, Beni, Kaka, Taipiplaya	3 Oct. 2008	UMSS 8989	9	43.4-85.6
	Bolivia, Amazonas, Mamore, Isiboro, Chipiriri, Río Colorado	23 Oct. 2008	UMSS 9060	25	37.7-72.2
<i>Hemibrycon</i> sp.19	Bolivia, Amazonas, Madera, Beni, Bopi, Río Peri, Trinidad Pampa	15 Sept. 2006	UMSS 0856	3	32.5-65.3
		18 Oct. 2009	UMSS 10062	5	93.7-120.2

Table 3 Morphometric data of some *Hemibrycon* species recognized in the Amazon. SD: Standard deviation

	<i>H. jelskii</i>			<i>H. huambonicus</i>			<i>H. beni</i>		<i>H. divisorensis</i>	
	Lectotype	Paratypes	SD	57530.1	57530.2	57530.3	Non types	SD	Non types	SD
	NMW 57553.3	N:17		N:1	N:1	N:1	N:110		N:27	
Standard length	82.0	72.6-107.3 (92.7)	SD	67.3	80.6	90.6	20.8-98.2 (51.7)	SD	32.1-87.4 (58.6)	SD
Percentages of Standard Length										
1. Depth of the body	32.8	30.6-38.3 (34.6)	2.3	33.4	33.7	33.1	26.2-33.6 (30.1)	1.4	31.6-39.2 (36.2)	1.8
2. Predorsal distance	49.4	48.5-52.6 (50.4)	1.3	51.7	49.9	50.1	49.9-59.6 (52.8)	1.7	47.6-53.3 (50.4)	1.2
3. Prepectoral distance	21.6	19.4-23.8 (21.4)	1.1	24.5	21.2	22.4	20.8-27.2 (23.6)	1.4	23.4-27.3 (24.4)	0.8
4. Prepelvic distance	40.9	38.2-45.7 (41.8)	2.1	45.8	43.7	41.9	24.0-48.5 (43.1)	2.3	41.5-45.8 (43.4)	1.3
5. Dorsal-pectoral distance	37.3	38.2-43.3 (40.5)	1.2	41.7	39.9	41.8	35.1-42.9 (39.1)	1.5	36.8-43.8 (40.5)	1.4
6. Preanal distance	56.3	53.0-62.9 (58.3)	2.4	61.2	59.9	57.1	58.3-65.4 (61.2)	1.6	56.4-61.1 (58.4)	1.3
7. Dorsal fin-hypural distance	54.6	52.2-57.1 (54.5)	1.7	53.4	52.8	54.2	44.2-55.4 (50.9)	2.2	51.1-57.3 (54.5)	1.5
8. Dorsal fin length	24.1	19.7-25.8 (22.3)	1.8	21.8	20.7	23.1	16.8-25.9 (21.6)	1.8	23.3-27.2 (25.0)	1.0
9. Pectoral fin length	21.3	18.4-23.2 (20.0)	1.2	21.3	17.9	22.4	16.9-23.2 (20.1)	1.1	19.9-22.7 (21.2)	0.8
10. Pelvic fin length	15.6	12.2-14.8 (13.4)	0.8	12.7	13.5	14.5	12.6-17.8 (14.9)	1.0	13.6-16.0 (14.9)	0.6
11. Anal fin length	17.4	12.2-17.1 (15.0)	1.5	15.8	15.3	20.4	10.9-20.0 (14.8)	1.4	13.5-19.4 (16.0)	1.4
12. Caudal peduncle depth	12.2	12.1-14.0 (13.1)	0.5	13.8	13.2	16.6	9.86-16.0 (13.2)	1.3	11.6-13.7 (12.5)	0.7
13. Caudal peduncle length	13.4	11.3-15.9 (13.7)	1.2	14.1	15.9	15.2	13.5-21.3 (17.6)	1.6	11.2-14.6 (13.0)	0.9
14. Dorsal-anal distance	32.1	31.0-36.7 (33.9)	1.8	33.7	31.9	33.4	22.8-30.1 (26.2)	1.4	30.7-38.7 (35.2)	2.1
15. Head length	21.6	18.5-23.8 (21.2)	1.4	22.4	20.7	23.1	19.4-33.1 (29.1)	1.7	23.3-27.2 (24.9)	0.9
Percentages of Head Length										
16. Snout length	21.5	15.9-25.6 (20.9)	2.0	21.2	19.1	20.6	14.3-30.8 (21.1)	2.6	20.6-30.1 (26.3)	2.3
17. Diameter of the eye	31.6	27.0-32.2 (29.1)	1.6	34.4	31.7	27.3	17.1-39.4 (26.3)	4.6	26.8-34.4 (31.3)	2.1
18. Postorbital length	49.7	49.0-59.4 (52.2)	3.2	43.7	46.7	56.0	39.3-67.8 (47.6)	4.0	41.4-50.2 (45.9)	2.2
19. Maxillary length	29.9	28.9-36.1 (31.4)	1.9	33.1	32.3	31.1	26.1-46.2 (32.8)	3.6	28.2-39.4 (35.0)	3.3

Table 4 Morphometric data of new Hemibrycon species described here from the Amazon River basin. SD: Standard deviation

	<i>H. megantoniensis</i> n. sp.			<i>H. lorethae</i> n. sp.			<i>H. convencionensis</i> n. sp.			<i>H. mamorensis</i> n. sp.			<i>H. chaparensis</i> n. sp.		
	Holotype	N:40	SD	Holotype	N: 22	SD	Holotype	N: 11	SD	Holotype	N: 90	SD	Holotype	N: 74	SD
Standard length	73.8	32.2-89.3 (55.5)		64.8	34.7-74.9 (53.7)		73.8	26.8-72.0 (39.7)		65.7	37.5-78.2 (55.7)		58.5	29.0-77.2 (54.2)	
Percentages of Standard Length															
1. Depth of the body	34.0	30.1-39.2 (39.2)	2.2	36.3	31.0-39.2 (35.0)	2.0	34.0	29.8-34.9 (32.5)	1.6	35.2	28.6-40.2 (34.2)	2.8	30.2	28.7-38.3 (32.8)	2.4
2. Predorsal distance	50.1	47.6-52.3 (52.3)	1.0	51.1	49.9-53.2 (51.7)	0.9	49.8	48.8-52.9 (51.4)	1.2	51.0	47.8-53.4 (50.3)	1.2	48.2	47.7-53.5 (49.9)	1.1
3. Prepectoral distance	23.6	22.9-26.2 (26.2)	0.8	23.3	21.9-25.1 (23.8)	0.9	22.1	22.6-26.1 (24.4)	1.0	23.4	22.0-26.5 (23.8)	0.9	23.2	21.5-27.9 (24.0)	1.1
4. Prepelvic distance	42.7	40.8-45.7 (45.7)	1.2	42.3	41.0-44.7 (42.3)	1.1	42.9	42.4-47.2 (44.1)	1.3	43.8	40.1-47.5 (42.0)	1.7	41.7	39.9-46.1 (43.1)	1.2
5. Dorsal-pectoral distance	40.4	36.8-42.6 (42.6)	1.5	40.1	37.8-43.8 (40.5)	1.6	39.9	35.7-40.9 (38.8)	1.5	40.6	36.0-43.9 (39.1)	2.0	38.1	35.0-44.1 (39.5)	2.0
6. Preanal distance	58.0	54.2-61.1 (61.1)	1.5	58.6	55.5-62.1 (57.6)	1.7	57.4	55.7-60.1 (57.8)	1.5	59.5	54.1-63.6 (57.1)	1.9	55.9	55.3-61.4 (58.0)	1.6
7. Dorsal fin-hypural distance	56.4	50.9-57.3 (57.3)	1.3	54.6	50.1-56.6 (53.0)	1.5	51.2	50.8-55.7 (52.7)	1.2	53.5	51.3-55.4 (53.5)	0.9	55.5	51.2-58.1 (54.4)	1.2
8. Dorsal fin length	24.0	23.1-27.2 (27.2)	0.9	25.0	22.7-28.5 (25.9)	1.3	21.9	21.7-24.0 (23.0)	0.8	22.0	21.2-25.8 (23.6)	0.8	22.5	21.9-26.1 (24.0)	0.9
9. Pectoral fin length	20.1	18.9-21.8 (21.8)	0.7	21.8	20.1-24.2 (22.9)	1.0	20.0	19.9-23.3 (22.0)	1.1	19.0	18.6-23.4 (21.0)	0.8	22.4	19.2-23.6 (20.8)	0.9
10. Pelvic fin length	13.6	12.4-15.7 (15.7)	0.7	14.4	12.9-16.3 (15.8)	0.8	14.2	13.4-14.8 (14.3)	0.5	14.1	13.6-16.7 (15.0)	0.7	16.0	11.9-16.3 (14.5)	0.9
11. Anal fin length	16.3	14.5-21.8 (17.8)	1.7	16.4	13.9-20.5 (16.8)	1.8	14.1	14.5-17.5 (16.0)	1.0	14.3	12.6-18.7 (15.3)	1.4	16.0	13.6-20.5 (17.2)	1.5
12. Caudal peduncle depth	12.3	9.66-13.8 (13.8)	0.8	12.2	11.0-14.0 (12.5)	0.8	13.6	10.3-13.9 (12.3)	1.0	12.5	11.0-13.4 (12.6)	0.5	10.7	10.3-13.6 (11.9)	0.7
13. Caudal peduncle length	14.1	11.9-15.1 (15.1)	0.7	12.0	9.67-13.3 (11.9)	1.0	12.1	10.6-14.2 (12.5)	1.1	12.6	11.2-15.9 (13.6)	1.0	16.0	11.0-16.8 (14.2)	1.2
14. Dorsal-anal distance	34.3	28.4-38.7 (38.7)	2.4	36.4	30.3-38.9 (34.1)	2.2	33.7	28.8-34.5 (31.6)	1.8	35.1	29.2-38.9 (33.8)	2.6	30.2	27.9-38.2 (32.7)	2.5
15. Head length	24.1	23.3-26.7 (26.7)	0.9	24.5	23.1-28.3 (25.6)	1.4	25.7	25.1-28.9 (26.8)	1.0	24.7	23.1-25.8 (24.4)	0.7	24.9	22.3-26.4 (24.0)	0.9
Percentages of Head Length															
16. Snout length	24.7	20.6-28.0 (23.9)	1.8	24.5	20.8-25.7 (23.4)	1.5	21.3	21.2-26.6 (23.0)	1.9	25.8	23.8-28.7 (26.4)	1.1	19.1	19.1-28.0 (23.6)	1.7
17. Diameter of the eye	30.5	26.4-37.9 (33.1)	2.6	30.8	30.8-36.9 (34.2)	1.9	29.0	29.0-37.5 (34.3)	2.2	27.3	26.5-35.6 (30.6)	1.8	32.1	27.5-36.8 (31.4)	2.2
18. Postorbital length	47.7	40.9-50.9 (45.7)	2.7	46.5	39.9-50.5 (45.9)	2.8	45.8	42.5-48.9 (45.9)	1.7	50.0	42.3-53.5 (48.3)	2.2	47.9	40.7-52.5 (47.3)	2.4
19. Maxillary length	26.9	23.4-31.9 (28.9)	2.1	39.6	34.1-42.7 (37.9)	2.2	36.9	33.0-41.7 (37.6)	2.8	33.7	31.3-38.6 (34.5)	1.5	28.0	23.0-31.7 (27.2)	1.7