

## REFERENCES

- Abbott, R.T. 1989. **Compendium of Landshells**. New York: Madison Publishing Associates.
- Aranyavalai, V. 1996. **Morphometry of Brown Tortoise *Manouria emys emys* and Burmese Black Tortoise *M. e. phayrei* in Thailand**. Master's Thesis, Department of Biology, Graduate School, Chulalongkorn University. (In Thai)
- Bentham Jutting, W.S.S. 1949. On a collection of non marine mollusca from Malaya in the Raffles Museum, Singapore, with an appendix on cave shell. **Bulletin of Raffles Museum** 19: 50-77.
- Bentham Jutting, W.S.S. 1960. Some note on land and freshwater Mollusca of Malaya. **Basteria** 24 (1 en 2):10-20.
- Blanford, W. T. 1902. On *Rhiostoma dalyi*, n. sp., and *Sesara megalodon*, n. sp., obtained by the late Mr. W. M. Daly in Siam. **Proceeding of malacological Society of London** 5: 34-35.
- Blanford, W.T. 1903. Notes on Mr. W. M. Daly's collections of land and fresh-water Mollusca of Siam. **Proceeding of malacological Society of London** 5: 274-284.
- Brown, R.W. 1956. **Composition of scientific words**. Baltimore: Reese Press.
- Gerlach, J. 1999. Snail of the genus *Pachnodus* (Mollusca; gastropoda; Enidae) : their origin and evolution. **Journal of Biogeography** 26: 251-255.
- Godwin-Austen, H.H. 1889. On a collection of land-shells made in Borneo by Mr. A. Everett, with descriptions of suppose new species. **Proc.Zool.Soc.Lond.** 1889: 332-355.
- Gude, G.K. 1921. Mollusca III: Land operculates. In Shipley, A. E. (ed.), **Fauna of British India Including Ceylon and Burma**, pp. 1-386. London: Taylor and Francis.
- Habe, T. 1965. Operculated land molluscs from Southeast Asia. **Nature and life in Southeast Asia** 4: 111-127.
- Hemmen, J., Hemmen, C. and Pathamakanthin, S. 1999. *Rhiostoma*. **La Conchiglia** Supplement to n. 292.
- Kanchanasakha, B., Simcharoen, S, and U Tin Than. 1998. **Carnivorous of mainland South East Asia**. Bangkok: Siam Thong Kit Printing.

- Kumprataung, W. 1988. **Comparative Studies on Reproductive System of *Achatina fulica*, *Hemiplecta distincta* and *Cyclophorus auranticus***. Master's Thesis, Department of Biology, Graduate School, Mahidol University.
- Laidlaw, F.F. 1932. Notes on the land Mollusca of the Batu Cave, Selangor, with description of two new species. **Bulletin of Raffles Museum** 7: 35-41.
- Laidlaw, F. F. 1939. A new *Rhiostoma* from Malaya. **Journal of Conchology** 21 (3): 166.
- Laidlaw, F. F. 1941. *Rhiostoma macalpine-woodsii* Laidlaw. **Journal of Conchology** 21 (8): 166.
- Lindberg, D.R. 1985. Shell sexual dimorphism of *Margarites vorticifera* : multivariant analysis and taxonomic implications. **Malacological Review** 18: 1-8.
- Moellendorff, O. F. VON. 1891. On the land freshwater shells of Perak. **Proc. Zool. Soc. Lond.**: 330-348.
- Moellendorff, O. F. VON. 1894. On a collection of the land-shell from the Samui islands, gulf of Siam. **Proc. Zool. Soc. Lond.**: 146-156.
- Panha, S. and Thanamitramanee, P. 1997. Land snails of Phliu national park, Thailand. **The Papustyla** 11 (4): 1-3.
- Panha, S., Sutcharit, C., Tongkerd, P., and Burch, J.B. 2001. Morphogeography of an endemic tree snail genus *Amphidromus* of Thailand (Pulmonata : Camaenidae). **Of Sea and Shore** 24 (2): 106-113.
- Patamakanthin, S. 2001. *Rhiostoma* from Thailand and Malaysia. **Of Sea and Shore**. 23 (4): 222-223.
- Ruhoff, F.A. 1980. Index to the species of mollusca introduced from 1850 to 1870. **Smithsonian Contribution to Zoology** No. 294.
- Ruppert, E. E. and Barnes, R.D. 1994. **Invertebrate Zoology**. 6<sup>th</sup> ed. Philadelphia: Saunders College Publishing.
- Salisbury, A. E. 1949. A new species of *Rhiostoma*. **Proceeding of Malacological Society of London** 28 (1): 41-42.
- Solem, A. 1966. Some non-marine mollusks from Thailand with notes on classification of Helicarionidae. **Spolia Zoologica Musei Hauniensis** 24: 1-114.

- Stanisic, J. 1998. Superfamily Cyclophoroidea. In Beesley, P. L., Ross, G. J. B., and Well, A. (eds.), **Mollusca : The Southern Synthesis**, pp. 703-706. Victoria: Brown Prior Anderson.
- Sutcharit, C., Tumpeesuwan, S., and Tongkerd, P. 2000. **Radula of some Land Operculated Snails from Southeast Asia**. Special Problem Report, Department of Biology, Graduate School, Chulalongkorn University. (In Thai).
- Suvatti, C. 1938. **Molluscs of Siam**. Bangkok: Bureau of Fisheries.
- Sykes, E. R. 1903. On the land-operculate Mollusca collected during the "Skeat Expedition" to the Malay Peninsula in 1899-1900. **Proceeding of Malacological Society of London** 1: 194-199.
- Thompson, F. G. 1969. Some Mexican and Central America land snails of the Family Cyclophoridae. **Zoologica: New York Zoological Society** 54 (2): 35-78.
- Thongnamchaima, B., and others. 1997. **Mammal of Huai Kha Khaeng Wildlife Sanctuary**. Bangkok: Siam Thong Kit Printing. (In Thai).
- Tomlin, J.R. LE B. 1931. Two new species of *Rhiostoma*. **Proceeding of Malacological Society of London** 19: 227-228.
- Tomlin, J.R. LE B. 1938. New Malay land shells. **Journal of Conchology** 21 (3): 73-75.
- Torre, C. DE LA, Bartsch, P., and Morrison, J. P. E. 1942. The cyclophorid operculate land mollusks of America. **United States National Museum Bulletin** 181: 1-293.
- Trew, A. 1990. **John R. Le B. Tomlin's New Molluscan Names**. Caerphilly: South Western Printers.
- Vaught, K. C. 1989. **A Classification of the Living Mollusca**. Abbott, R.T. and Boss, K.J. (eds.). Michigan: BookCrafters.



# Appendices

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย



# Appendix I

## Collecting Localities

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

No.	Locality	Date	living	shell	species
1	Tham Pha Tha Phon, Noen Ma Prang, Phitsanulok	09-10-2000	-	25	<i>R. sp.4</i>
2	Ko Kut, Trat	21-10-2000	-	-	-
3	Ko Samaesan, Chonburi	15-11-2000	-	-	-
4	Ko Chuang, Chonburi	16-11-2000	-	-	-
5	Ko Chan, Chonburi	16-11-2000	-	-	-
6	Ko Phai, Chonburi	17-11-2000	-	-	-
7	Ko Rin, Chonburi	18-11-2000	-	-	-
8	Ko Man Wichai, Chonburi	18-11-2000	-	-	-
9	Ko Khram, Chonburi	19-11-2000	-	-	-
10	Tham Pha Hong, Nam Nao N.p., Phetchabun	02-12-2000	-	-	-
11	Limestone hill near Phu Pha Man, Khon Kaen	03-12-2000	-	-	-
12	Khao Bin, Chom Bueng, Ratchaburi	10-12-2000	-	-	-
13	Khao Prathap Chang, Chom Bueng, Ratchaburi	10-12-2000	-	-	-
14	Khao Hua Chang, Kaeng Krachan N.P., Phetchaburi	20-01-2001	-	-	-
15	Khao Tham Phra, Pak Tho, Ratchaburi	27-01-2001	-	-	-
16	Wat Tham Kunchon, Mueang, Ratchaburi	27-01-2001	-	-	-
17	Tham Chomphon, Chom Bueng, Ratchaburi	27-01-2001	-	-	-
18	Khao Chong Phran, Photharam, Ratchaburi	27-01-2001	-	-	-
19	Tham Mueang On, Mae On, Chiang Mai	11-03-2001	-	1	<i>R. sp.1</i>
20	Khao Phanom Phloeng, Si Satchanalai, Sukhothai	12-03-2001	-	-	-
21	Tham Phanthurat, Phanom, Surat Thani	28-04-2001	-	-	-
22	Khao Phlu, Lamae, Chumphon	29-03-2001	-	-	-
23	Khao Kriap, Lamae, Chumphon	29-03-2001	-	-	-
24	Limestone hill near Sawi, Chumphon	29-03-2001	-	-	-
25	Khao Maeo, Pathio, Chumphon	30-03-2001	-	-	-
26	Khao Phlu, Pathio, Chumphon	30-03-2001	-	-	-
27	Limestone hill near Bang Saphan Noi, Prachuap Khiri Khan	30-03-2001	-	-	-
28	Hup Ta Hae, Pathio, Chumphon	30-03-2001	-	-	-
29	Khao Na Tham, Pathio, Chumphon	30-03-2001	-	-	-
30	Khao Lom Muak, Mueang, Prachuap Khiri Khan	31-03-2001	-	1	<i>R. housei</i>
31	Khao Kalok, Pran Buri, Prachuap Khiri Khan	31-03-2001	-	-	-
32	Khao Tham Rong, Ban Lat, Phetcha Buri	31-03-2001	-	-	-
33	Khao Yoi, Khao Yoi, Phetcha Buri	31-03-2001	-	-	-
34	Kosamphi Forest Park, Kosum Phisai, Maha Sarakham	04-04-2001	-	-	-
35	Limestone hill near Chiang Dao, Chiang Mai	05-04-2001	-	1	<i>R. sp.1</i>
36	Khao Paktriam, Suk Samran, Ranong	24-04-2001	-	-	-
37	Khlong Nakha W.S., Ranong	24-04-2001	-	-	-
38	Ton Kloi, Suk Samran, Ranong	25-04-2001	-	-	-
39	Khao Namtok, Namtok Ngao N.P., Ranong	26-04-2001	-	-	-

No.	Locality	Date	Living	Shell	Species
40	Namtok Phlio N.P., Chanthaburi	08-05-2001	2	1	<i>R. hainesi</i>
41	Phu Tham Pra, Kut Chum, Yasothon	16-05-2001	-	-	-
42	Pha Nam Yoi, Nong Phok, Roi Et	16-05-2001	-	-	-
43	Khao Takrup, Khao Ang Ruenai W.S., Chachoengsao	27-05-2001	-	-	-
44	Khao Siwa, Khlong Hat, Sa Kaeo	29-05-2001	-	4	<i>R. sp.9</i>
45	Khao Soi Dao W.S., Chanthaburi	29-05-2001	1	-	<i>R. hainesi</i>
46	Namtok Phlio N.P., Chanthaburi	29-05-2001	3	-	<i>R. hainesi</i>
47	Khao Cha-ang-on, Bo Thong, Chon Buri	10-06-2001	3	24	<i>R. sp.6</i>
48	Limestone hill near Wat Phluang Thong, Bo Thong, Chon Buri	10-06-2001	125	87	<i>R. sp.4</i>
49	Pa Sa-on, Mueang, Kalasin	12-06-2001	-	-	-
50	Wat Tham Suwannakhuha, Mueang, Phang-nga	07-07-2001	54	25	<i>R. jalorensis</i>
51	Limestone hill near Ao Pra Nang, Mueang, Krabi	08-07-2001	-	-	-
52	Tham Chang Si, Mueang, Krabi	08-07-2001	-	7	<i>R. jalorensis</i>
53	Wat Tham Suea, Mueang, Krabi	08-07-2001	-	4	<i>R. jalorensis</i>
54	Khao Pina, Huai Yot, Trang	09-07-2001	-	-	-
55	Khao Pra Yod, Huai Yot, Trang	09-07-2001	-	-	-
56	Tham Le Khao Kop, Huai Yot, Trang	09-07-2001	-	-	-
57	Khao To Paya Wang, Mueang, Satun	10-07-2001	1	1	<i>P. asiphon</i>
58	Khao Rayabangsa, Mueang, Satun	10-07-2001	-	-	-
59	Khao Wang Khamen, Sai yok, Kanchanaburi	16-08-2001	-	-	-
60	Khao Samokhon, Tha Wung, Lop Buri	19-08-2001	-	21	<i>R. sp.8</i>
61	Khao Ti Hin, Ban Mi, Lop Buri	19-08-2001	-	20	<i>R. sp.8</i>
62	Phu Kum Khao, Sahatsakhan, Kalasin	25-08-2001	-	-	-
63	Namtok Na Mueang, Ko Samui, Surat Thani	07-09-2001	14	8	<i>R. samuiense</i>
64	Namtok Hin Lat, Ko Samui, Surat Thani	07-09-2001	15	4	<i>R. samuiense</i>
65	Khao Wang Thong, Khanom, Nakhon si Thammarat	07-09-2001	10	10	<i>R. chupingense</i>
66	Khao Khun Phanom, Phrom Khiri, Nakhon si Thammarat	08-09-2001	-	-	-
67	Khao Phra Thong, Cha-uat, Nakhaon si Thammarat	08-09-2001	-	-	-
68	Tham Sumano, Srinagarindra, Phattalung	08-09-2001	5	-	<i>P. asiphon</i>
69	Khao Tanyong, Mueang, Narathiwat	09-09-2001	-	-	-
70	Namtok Sai Khao, Khokpho, Pattani	10-09-2001	-	-	-
71	Wat khuhaphimuk, Mueang, Yala	10-09-2001	-	-	-
72	Namtok Phlio N.P., Chanthaburi	19-09-2001	2	16	<i>R. hainesi</i>
73	Phanom Sawai Forast Park, Mueang, Surin	23-09-2001	-	-	-
74	Khao Kradong Forest park, Mueang, Buri Ram	23-09-2001	-	-	-
75	Phu Phan, Nam Som, Udon Thani	07-10-2001	-	-	-
76	Phu Pha Hak N.P., Sakon Nakhon	11-10-2001	-	-	-
77	Phu Thok, Nong Khai	12-10-2001	-	-	-
78	Phu Wua W.S., Nong Khai	12-10-2001	-	-	-

No.	Locality	Date	Living	Shell	Species
79	Tham Arawan, Pa Sang, Lamphun	22-10-2001	-	-	-
80	Tham Pha Thai, Ngao, Lampang	22-10-2001	-	-	-
81	Tham Pha Tup Forest Park, Mueang, Nan	23-10-2001	-	7	<i>R. sp.1</i>
82	Tham Pha Nang Khoi, Rong Kwang, Phrae	24-10-2001	-	-	-
83	Namtok Mae Phun, Laplae, Uttaradit	24-10-2001	-	-	-
84	Wat Khao Tham, Mueang, Tak	25-10-2001	-	-	-
85	Khao Sanam Phriang W.S., Kamphang Phet	25-10-2001	-	-	-
86	Phu Pha Thoep N.P., Mukdahan	28-10-2001	-	-	-
87	Wat Tham Khuha Sawan, Khong Chiam, Ubon Ratchathani	29-10-2001	-	-	-
88	Namtok Hui Chan, Khun Han, Si Sa Ket	30-10-2001	-	-	-
89	Khun Ming Mueang Loei, Loei	16-02-2002	-	-	-
90	Tham Pha Ya, Na Duang, Loei	16-02-2002	-	-	-

Abbreviation:

N.P. refers National Park

W.S. refers Wildlife Sanctuary



ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย





## Appendix II

# Cataloging specimens

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

Coll. No.	Scientific Name	Locality	Habitat	Date	Collector	Specimen	
						Wet	Shell
R-01	<i>P. asiphon</i>	Tham Sumano, Srinagarindra, Phatthalung	Base of limestone hill	13-05-1997	Malaco. Lab.	-	4
R-02	<i>P. asiphon</i>	Limestone hill near Sadao, Songkhla	Base of limestone hill	13-10-1999	Malaco. Lab.	-	2
R-03	<i>P. asiphon</i>	Khao To Paya Wang, Mueang, Satun	Base of limestone hill	10-07-2001	S. Tumpeesuwan	-	1
R-04	<i>R. chupingense</i>	Khao Pu Khao Ya N.P., Phatthalung	Base of limestone hill	21-03-1998	Malaco. Lab.	-	27
R-05	<i>R. chupingense</i>	Limestone hill near Ban Na San, Surat Thani	Base of limestone hill	03-01-1999	P. Dhamrongrojwattana	-	7
R-06	<i>R. chupingense</i>	Khao Chokchae, Kanchanadit, Surat Thani	Base of limestone hill	17-04-1999	P. Dhamrongrojwattana	-	1
R-07	<i>R. chupingense</i>	Namtok Na Mueang, Ko Samui, Surat Thani	Granite island covers by evergreen forest	29-12-1999	P. Dhamrongrojwattana	-	1
R-08	<i>R. chupingense</i>	Limestone hill near Don Sak, Surat Thani	Base of limestone hill	10-02-2000	Malaco. Lab.	-	35
R-09	<i>R. chupingense</i>	Limestone hill near Don Sak, Surat Thani	Base of limestone hill	11-02-2000	Malaco. Lab.	-	1
R-10	<i>R. chupingense</i>	Tham Khamin, Ban Na San, Surat Thani	Base of limestone hill	15-04-2000	P. Dhamrongrojwattana	-	4
R-11	<i>R. chupingense</i>	Khao Wang Thong, Khanom, Nakhon Si Thammarat	On ground of limestone hill	07-09-2001	S. Tumpeesuwan	-	10
R-12	<i>R. housei</i>	Limestone hill near Ban Bueng, Chon Buri	Base of limestone hill	04-02-1995	S. Panha	-	1
R-13	<i>R. housei</i>	Doi Phu Nang N.P., Phayao	Base of limestone hill	10-01-1998	S. Tumpeesuwan	-	6
R-14	<i>R. housei</i>	Phu Khiao W.S., Chaiyaphum	Base of limestone hill	12-02-1998	Malaco. Lab.	-	2
R-15	<i>R. housei</i>	Limestone hill near Kaeng Khoi, Saraburi	Base of limestone hill	14-02-1998	Malaco. Lab.	-	3
R-16	<i>R. housei</i>	Khao Luk Chang, Pak Chong, Nakhon Ratchasima	Base of limestone hill	18-10-1998	Malaco. Lab.	-	73
R-17	<i>R. housei</i>	Phu Khiao W.S., Chaiyaphum	Base of limestone hill	01-04-1999	Malaco. Lab.	-	3
R-18	<i>R. housei</i>	Khao Luk Chang, Pak Chong, Nakhon Ratchasima	Base of limestone hill	22-04-1999	Malaco. Lab.	-	70
R-19	<i>R. housei</i>	Doi Phu Nang N.P., Phayao	Base of limestone hill	01-04-2000	P. Uttaruk	-	19
R-20	<i>R. housei</i>	Khao Luk Chang, Pak Chong, Nakhon Ratchasima	Base of limestone hill	09-04-2000	Malaco. Lab.	-	8
R-21	<i>R. housei</i>	Wat Thepphithakpunnaram, Kaeng Khoi, Saraburi	On ground of limestone hill	09-04-2000	Malaco. Lab.	-	4

Coll. No.	Scientific Name	Locality	Habitat	Date	Collector	Specimen	
						Wet	Shell
R-22	<i>R. housei</i>	Khao Lom Muak, Mueang, Prachaup Khiri khan	Base of limestone hill near the sea	31-03-2001	C. Sutcharit	-	1
R-23	<i>R. jalorensis</i>	Khong Sang W.S., Surat Thani	Base of limestone hill	10-05-1997	Malaco. Lab.	-	4
R-24	<i>R. jalorensis</i>	Wat Na San, Ban Na San, Surat Thani	Base of limestone hill	28-04-1998	P. Dhamrongrojwattana	-	13
R-25	<i>R. jalorensis</i>	Ao Phang-nga N.P., Phang-nga	Base of limestone hill near the sea	10-12-1998	Malaco. Lab.	-	41
R-26	<i>R. jalorensis</i>	Limestone hill near Ao Phang-nga, Mueang, Phang-nga	Base of limestone hill near the sea	10-12-1998	Malaco. Lab.	-	20
R-27	<i>R. jalorensis</i>	Ko Phrao, Ao Phang-nga, Phang-nga	On ground of limestone island	11-12-1998	Malaco. Lab.	-	53
R-28	<i>R. jalorensis</i>	Wat Tham Suwannakhuha, Mueang, Phang-nga	Base of limestone hill	12-12-1998	Malaco. Lab.	-	16
R-29	<i>R. jalorensis</i>	Wat Tham Suwannakhuha, Mueang, Phang-nga	Base of limestone hill	07-07-2001	S. Tumpeesuwan	-	25
R-30	<i>R. jalorensis</i>	Tham Chang Si, Mueang, Krabi	Base of limestone hill	08-07-2001	S. Tumpeesuwan	-	7
R-31	<i>R. jalorensis</i>	Wat Tham Suea, Mueang, Krabi	On ground of limestone valley	08-07-2001	S. Tumpeesuwan	-	4
R-32	<i>R. samuiense</i>	Namtok Na Mueang, Ko Samui, Surat Thani	Granite island covers by evergreen forest	29-12-1999	P. Dhamrongrojwattana	-	1
R-33	<i>R. samuiense</i>	Namtok Na Mueang, Ko Samui, Surat Thani	Granite island covers by evergreen forest	11-02-2000	Malaco. Lab.	-	2
R-34	<i>R. samuiense</i>	Namtok Na Mueang, Ko Samui, Surat Thani	Granite island covers by evergreen forest	07-09-2001	S. Tumpeesuwan	-	8
R-35	<i>R. samuiense</i>	Namtok Hin Lat, Ko Samui, Surat Thani	Granite island covers by evergreen forest	07-09-2001	S. Tumpeesuwan	-	4
R-36	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Granite hill covers by evergreen forest	14-08-1998	Malaco. Lab.	-	34
R-37	<i>R. hainesi</i>	Khao Chamao Khao Wong N.P., Rayong	Granite hill covers by evergreen forest	03-07-2000	C. Meesukkho	-	1
R-38	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Granite hill covers by evergreen forest	27-07-2000	Malaco. Lab.	-	16
R-39	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Granite hill covers by evergreen forest	05-05-2001	S. Tumpeesuwan	-	1
R-40	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Granite hill covers by evergreen forest	19-09-2001	C. Sutcharit	-	17
R-41	<i>R. sp.1</i>	Limestone hill near Pang Mapha, Mae Hong Son	Base of limestone hill	09-05-1998	Malaco. Lab.	-	5
R-42	<i>R. sp.1</i>	Tham Pang Kham, Pang Mapha, Mae Hong Son	Base of limestone hill	09-05-1998	Malaco. Lab.	-	1
R-43	<i>R. sp.1</i>	Tham Pha Mon, Pang Mapha, Mae Hong Son	Base of limestone hill	11-05-1998	Malaco. Lab.	-	2

Coll. No.	Scientific Name	Locality	Habitat	Date	Collector	Specimen	
						Wet	Shell
R-44	<i>R. sp.1</i>	Tham Prichinda, Doi Inthanon N.P., Chiang Mai	Base of limestone hill	16-05-1998	Malaco. Lab.	-	5
R-45	<i>R. sp.1</i>	Tham Mae Suai, Mae Suai, Chiang Rai	Base of limestone hill	17-05-1998	Malaco. Lab.	-	13
R-46	<i>R. sp.1</i>	Tham Pla, Mae Sai, Chiang Rai	Base of limestone hill	18-05-1998	Malaco. Lab.	-	8
R-47	<i>R. sp.1</i>	Tham Pha Chom, Mae Sai, Chiang Rai	Base of limestone hill	19-05-1998	Malaco. Lab.	-	5
R-48	<i>R. sp.1</i>	Limestone hill near Chai Prakan, Chiang Mai	Base of limestone hill	18-03-2000	Malaco. Lab.	-	6
R-49	<i>R. sp.1</i>	Tham Mueang On, Mae On, Chiang Mai	On ground of limestone hill	11-03-2001	C. Sutcharit	-	1
R-50	<i>R. sp.1</i>	Limestone hill near Chiang Dao, Chiang Mai	Base of limestone hill	05-04-2001	Malaco. Lab.	-	1
R-51	<i>R. sp.1</i>	Tham Pha Tup Forest Park, Mueang, Nan	Sacrificing stone in hole of limestone hill	23-10-2001	S. Tumpeesuwan	-	7
R-52	<i>R. sp.2</i>	Khao Noi, Mueang, Nakhon Sawan	Base of limestone hill	17-04-1999	Malaco. Lab.	-	100
R-53	<i>R. sp.3</i>	Phu khiao W.S., Chaiyaphum	Base of limestone hill	18-04-1999	Malaco. Lab.	-	100
R-54	<i>R. sp.4</i>	Wat Phluang Thong, Bo Thong, Chon Buri	Base of limestone hill	14-03-1998	Malaco. Lab.	-	43
R-55	<i>R. sp.4</i>	Wat Phluang Thong, Bo Thong, Chon Buri	Base of limestone hill	20-06-1999	Malaco. Lab.	-	35
R-56	<i>R. sp.4</i>	Wat Tham Muang, Noen Ma Prang, Phitsanulok	Base of limestone hill	05-10-1999	Malaco. Lab.	-	8
R-57	<i>R. sp.4</i>	Wat Phluang Thong, Bo Thong, Chon Buri	Base of limestone hill	28-07-2000	Malaco. Lab.	-	25
R-58	<i>R. sp.4</i>	Khao Patthawi, Thap Than, Uthai Thani	Base of limestone hill	29-07-2000	C. Sutcharit	-	5
R-59	<i>R. sp.4</i>	Tham Pha Tha Phon, Noen Ma Prang, Phitsanulok	Base of limestone hill	09-10-2000	S. Tumpeesuwan	-	25
R-60	<i>R. sp.4</i>	Wat Phluang Thong, Bo Thong, Chon Buri	Base of limestone hill	10-06-2001	S. Tumpeesuwan	-	87
R-61	<i>R. sp.5</i>	Khao Phanom Wang, Kanchanadit, Surat Thani	Base of limestone hill	14-04-2000	P. Dhamrongrojwattana	-	28
R-62	<i>R. sp.5</i>	Khao Phanom Wang, Kanchanadit, Surat Thani	Base of limestone hill	28-12-2000	P. Dhamrongrojwattana	-	5
R-63	<i>R. sp.6</i>	Khao Cha-ang-on, Bo Thong, Chon Buri	Base of limestone hill	20-06-1999	Malaco. Lab.	-	6
R-64	<i>R. sp.6</i>	Khao Cha-ang-on, Bo Thong, Chon Buri	Base of limestone hill	10-06-2001	S. Tumpeesuwan	-	24
R-65	<i>R. sp.7</i>	Ko Wua Ta Lap, Mu Ko Ang Thong N.P., Surat Thani	On ground of limestone island	24-03-1998	Malaco. Lab.	-	25

Coll. No.	Scientific Name	Locality	Habitat	Date	Collector	Specimen	
						Wet	Shell
R-66	<i>R. sp.8</i>	Khao Samokhon, Tha Wung, Lop Buri	Sacrificing stone in hole of limestone hill	19-08-2001	S. Tumpeesuwan	-	21
R-67	<i>R. sp.8</i>	Khao Ti Hin, Ban Mi, Lop Buri	Sacrificing stone in hole of limestone hill	19-08-2001	S. Tumpeesuwan	-	20
R-68	<i>R. sp.9</i>	Khao Wong, Wang Chan, Rayong	Base of limestone hill	29-05-1998	Malaco. Lab.	-	14
R-69	<i>R. sp.9</i>	Khao Chakan, Khao Chakan, Sa Kaeo	Base of limestone hill	07-04-2000	Malaco. Lab.	-	10
R-70	<i>R. sp.9</i>	Khao Chakan, Khao Chakan, Sa Kaeo	Base of limestone hill	27-07-2000	Malaco. Lab.	-	12
R-71	<i>R. sp.9</i>	Khao Siwa, Khlong Hat, Sa Kaeo	On ground of limestone hill	29-05-2001	Malaco. Lab.	-	4
R-72	<i>P. asiphon</i>	Khao To Paya Wang, Mueang, Satun	In the hole of ground of limestone hill	10-07-2001	T. Bundhitwongrat	1	-
R-73	<i>P. asiphon</i>	Tham Sumano, Srinagarindra, Phatthalung	In the hole of ground of limestone hill	08-09-2001	T. Bundhitwongrat	5	-
R-74	<i>R. chupingense</i>	Limestone hill near Donsak, Surat Thani	Base of limestone hill	11-02-2000	Malaco. Lab.	3	-
R-75	<i>R. chupingense</i>	Khao Wang Thong, Khanom, Nakhon Si Thammarat	Under leaf litter on ground of limestone hill	07-09-2001	S. Tumpeesuwan	10	-
R-76	<i>R. housei</i>	No Locality	-	15-08-1998	Malaco. Lab.	16	-
R-77	<i>R. housei</i>	Doi Phu Nang N.P., Phayao	Under leaf litter at base of limestone hill	07-08-1999	Malaco. Lab.	3	-
R-78	<i>R. housei</i>	Doi Phu Nang N.P., Phayao	Under leaf litter at base of limestone hill	01-04-2000	P. Uttaruk	6	-
R-79	<i>R. housei</i>	Khao Luk Chang, Pak Chong, Nakhon Ratchasima	Base of limestone hill	09-04-2000	Malaco.Lab.	16	-
R-80	<i>R. housei</i>	Wat Thepphithakpunnaram, Nakhon Ratchasima	Under leaf litter on ground of limestone hill	09-04-2000	Malaco.Lab.	2	-
R-81	<i>R. housei</i>	No Locality	-	-	Malaco.Lab.	8	-
R-82	<i>R. jalorensis</i>	Wat Tham Suwannakhuha, Mueang, Phang-nga	Under leaf litter at base of limestone hill	12-12-1998	Malaco.Lab.	1	-
R-83	<i>R. jalorensis</i>	Wat Tham Suwannakhuha, Mueang, Phang-nga	Under leaf litter at base of limestone hill	07-07-2001	S. Tumpeesuwan	54	-
R-84	<i>R. samuiense</i>	Namtok Na Mueang, Ko Samui, Surat Thani	Under leaf litter on granite island	07-09-2001	S. Tumpeesuwan	14	-

Coll. No.	Scientific Name	Locality	Habitat	Date	Collector	Specimen	
						Wet	Shell
R-85	<i>R. samuiense</i>	Namtok Hin Lat, Ko Samui, Surat Thani	Under leaf litter on granite island	07-09-2001	S. Tumpeesuwan	15	-
R-86	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Under leaf litter in Granite hill	15-08-1998	Malaco. Lab.	2	-
R-87	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Under leaf litter in Granite hill	27-07-2000	Malaco. Lab.	4	-
R-88	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Under leaf litter in Granite hill	05-05-2001	S. Tumpeesuwan	2	-
R-89	<i>R. hainesi</i>	Khao Soi Dao W.S., Chanthaburi	Under leaf litter in Granite hill	29-05-2001	Malaco. Lab.	1	-
R-90	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Under leaf litter in Granite hill	29-05-2001	S. Tumpeesuwan	3	-
R-91	<i>R. hainesi</i>	Namtok Phlio N.P., Chanthaburi	Under leaf litter in Granite hill	19-09-2001	C. Sutcharit	2	-
R-92	<i>R. sp.1</i>	Tham Pla, Mae Sai, Chiang Rai	Under leaf litter at base of limestone hill	18-05-1998	Malaco.Lab.	36	-
R-93	<i>R. sp.1</i>	Tham Pum, Mae Sai, Chiang Rai	Under leaf litter at base of limestone hill	18-05-1998	Malaco.Lab.	24	-
R-94	<i>R. sp.1</i>	Tham Pha chom, Mae Sai, Chiang Rai	Under leaf litter at base of limestone hill	19-05-1998	Malaco.Lab.	9	-
R-95	<i>R. sp.2</i>	Khao Noi, Mueang, Nakhon Sawan	Under leaf litter at base of limestone hill	17-04-1999	Malaco.Lab.	11	-
R-96	<i>R. sp.3</i>	Phu Khaeo W.S., Phu Khaeo, Chaiyaphum	Under leaf litter at base of limestone hill	01-04-1999	Malaco.Lab.	9	-
R-97	<i>R. sp.4</i>	Wat Phluang Thong, Bo Thong, Chon Buri	Under leaf litter at base of limestone hill	20-06-1999	Malaco.Lab.	1	-
R-98	<i>R. sp.4</i>	Wat Phluang Thong, Bo Thong, Chon Buri	Under leaf litter at base of limestone hill	10-06-2001	S. Tumpeesuwan	125	-
R-99	<i>R. sp.6</i>	Khao Cha-ang-on, Bo Thong, Chon Buri	Under leaf litter at base of limestone hill	10-06-2001	S. Tumpeesuwan.	3	-
R-100	<i>R. sp.9</i>	Khao Chakan, Khao Chakan, Sa Kaeo	Base of limestone hill	07-04-2000	Malaco.Lab.	3	-

Abbreviation:

Coll. No. refers Collection number

Abbreviation: (continue)

C. Meesukkho refers Miss Chatnaree Meesukkho

C. Sutcharit refers Mr. Chirasak Sutcharit

Malaco. Lab. refers Malacology Laboratory of Chulalongkorn University

N.P. refers National Park

P. Dhamrongrojwattana refers Mr. Pongrat Dhamrongrojwattana

P. Uttarak refers Mr. Pornchai Uttarak

S. Panha refers Assoc. Prof. Dr. Somsak Panha

S. Tumpeesuwan refers Mr. Sakboworn Tumpeesuwan

T. Bundhitwongrat refers Mr. Thanakhom Bundhitwongrat

W.S. refers Wildlife Sanctuary



ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย



## Appendix III

# Shell Morphological Data

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย



Shell of *Pterocyclus asiphon*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-01	1	1.880	2.179	2.404	1.403	0.920	0.483	0	0	0.751
2	R-01	2	1.833	2.046	2.272	1.298	0.902	0.396	0	0	0.726
3	R-01	3	1.900	2.124	2.325	1.404	0.929	0.475	0	0	0.780
4	R-01	4	1.702	1.914	2.134	1.116	0.806	0.310	0	0	0.670
5	R-02	1	1.993	2.209	2.410	1.344	0.866	0.478	0	0	0.790
6	R-02	2	1.890	2.180	2.395	1.230	0.844	0.386	0	0	0.776
7	R-03	1	1.928	2.168	2.431	1.345	0.914	0.431	0	0	0.835

Shell of *Rhiostoma chupingense*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-04	1	1.673	1.920	2.850	1.895	1.609	0.286	1.522	2.215	0.767
2	R-04	2	1.764	2.033	3.268	2.053	1.662	0.391	1.711	2.44	0.830
3	R-04	3	1.715	1.981	2.920	1.818	1.545	0.273	1.463	2.136	0.815
4	R-04	4	1.600	1.872	2.899	1.670	1.341	0.329	1.547	1.994	0.780
5	R-04	5	1.756	2.076	2.934	1.898	1.508	0.390	1.395	2.311	0.831
6	R-04	6	1.646	1.946	3.014	1.894	1.578	0.316	1.57	2.302	0.811
7	R-04	7	1.636	1.908	2.842	1.908	1.559	0.349	1.539	2.306	0.803
8	R-04	8	1.653	1.908	3.110	1.979	1.663	0.316	1.842	2.312	0.790
9	R-04	9	1.615	1.937	2.901	1.924	1.587	0.337	1.634	2.517	0.778
10	R-04	10	1.515	1.800	2.834	1.682	1.428	0.254	1.497	2.271	0.779
11	R-04	11	1.587	1.874	2.727	1.616	1.268	0.348	1.282	1.881	0.755
12	R-04	12	1.562	1.814	2.868	1.877	1.477	0.400	1.661	2.293	0.780
13	R-04	13	1.580	1.860	2.732	1.415	1.152	0.263	1.14	1.78	0.780
14	R-04	14	1.628	1.916	2.772	1.756	1.411	0.345	1.392	1.981	0.752
15	R-04	15	1.627	1.988	2.920	1.677	1.359	0.318	1.306	1.817	0.798
16	R-04	16	1.619	1.920	2.830	1.723	1.392	0.311	1.414	1.925	0.746
17	R-04	17	1.676	1.957	2.867	1.777	1.445	0.277	1.38	1.878	0.782
18	R-04	18	1.708	2.037	2.884	1.550	1.273	0.322	1.295	1.75	0.828
19	R-04	19	1.608	1.894	2.724	1.668	1.343	0.325	1.172	1.852	0.750
20	R-04	20	1.609	1.891	2.690	1.472	1.218	0.254	1.132	1.631	0.770
21	R-04	21	1.582	1.889	2.594	1.569	1.326	0.243	1.088	1.603	0.753
22	R-04	22	1.511	1.767	2.502	1.389	1.061	0.328	1.026	1.533	0.735
23	R-04	23	1.550	1.820	2.375	1.399	1.038	0.361	0.86	1.225	0.780
24	R-04	24	1.554	1.796	2.658	1.600	1.174	0.426	1.203	1.647	0.727
25	R-04	25	1.546	1.843	2.578	1.503	1.170	0.333	1.13	1.516	0.746
26	R-04	26	1.616	1.901	2.499	1.626	1.191	0.435	0.886	1.309	0.727

Shell of *Rhiostoma chupingense* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
27	R-04	27	1.505	1.808	2.485	1.318	0.990	0.328	0.951	1.358	0.727
28	R-05	1	1.720	2.022	2.832	1.742	1.475	0.267	1.381	2.16	0.779
29	R-05	2	1.730	2.040	2.777	1.715	1.292	0.423	1.204	1.847	0.728
30	R-05	3	1.679	1.951	2.831	1.878	1.535	0.343	1.563	2.273	0.786
31	R-05	4	1.658	1.952	2.702	1.523	1.253	0.270	1.186	1.727	0.753
32	R-05	5	1.622	1.953	2.530	1.424	1.098	0.326	0.984	1.314	0.734
33	R-05	6	1.625	1.872	2.556	1.496	1.221	0.275	1.118	1.721	0.714
34	R-05	7	1.561	1.845	2.433	1.392	1.071	0.321	0.989	1.286	0.672
35	R-06	1	1.634	1.883	2.386	1.497	1.057	0.440	0.749	1.195	0.731
36	R-07	1	1.669	1.962	2.951	1.820	1.452	0.368	1.238	1.438	0.791
37	R-08	1	1.853	2.210	2.990	1.578	1.322	0.256	1.322	2.095	0.808
38	R-08	2	1.790	2.103	2.640	1.421	1.073	0.348	0.934	1.622	0.726
39	R-08	3	1.770	2.084	2.716	1.648	1.264	0.384	1.183	1.887	0.786
40	R-08	4	1.731	2.070	2.661	1.610	1.350	0.260	1.271	1.767	0.755
41	R-08	5	1.783	2.141	2.756	1.638	1.272	0.366	1.061	1.619	0.767
42	R-08	6	1.722	2.018	2.807	1.630	1.304	0.326	1.35	1.771	0.764
43	R-08	7	1.777	2.065	2.788	1.604	1.240	0.364	1.153	1.763	0.757
44	R-08	8	1.799	2.074	2.586	1.556	1.133	0.423	0.899	1.332	0.752
45	R-08	9	1.850	2.186	2.759	1.458	1.198	0.260	0.95	1.417	0.783
46	R-08	10	1.737	2.083	2.552	1.437	1.093	0.344	0.78	1.234	0.732
47	R-08	11	1.721	1.982	2.529	1.478	1.128	0.350	0.908	1.495	0.760
48	R-08	12	1.707	2.042	2.610	1.400	1.155	0.245	0.993	1.565	0.748
49	R-08	13	1.648	1.966	2.562	1.515	1.218	0.297	1	1.434	0.737
50	R-08	14	1.708	1.61	2.472	1.428	1.195	0.233	0.865	1.201	0.719
51	R-08	15	1.744	2.030	2.797	1.648	1.311	0.337	1.349	2.041	0.751
52	R-08	16	1.670	2.034	2.527	1.526	1.166	0.360	0.942	1.262	0.754
53	R-08	17	1.694	2.014	2.690	1.589	1.314	0.275	1.168	1.677	0.777
54	R-08	18	1.627	1.941	2.495	1.426	1.116	0.310	0.942	1.444	0.704
55	R-08	19	1.662	1.952	2.342	1.390	0.953	0.437	0.576	1.202	0.697
56	R-08	20	1.793	2.078	2.534	1.502	1.061	0.441	0.74	1.261	0.761
57	R-08	21	1.710	2.047	2.469	1.245	0.971	0.274	0.748	1.205	0.707
58	R-08	22	1.668	2.006	2.392	1.243	0.940	0.303	0.513	0.888	0.708
59	R-08	23	1.688	2.007	2.448	1.262	0.912	0.350	0.638	1.076	0.700
60	R-08	24	1.640	1.958	2.356	1.243	0.949	0.294	0.632	1.095	0.698
61	R-08	25	1.637	1.909	2.467	1.360	1.070	0.290	0.804	1.294	0.722
62	R-08	26	1.658	1.930	2.412	1.380	1.054	0.326	0.766	1.358	0.714
63	R-08	27	1.674	1.980	2.358	1.366	1.021	0.345	0.798	1.095	0.707

Shell of *Rhiostoma chupingense* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
64	R-08	28	1.586	1.925	2.328	1.264	0.952	0.312	0.672	1.069	0.711
65	R-08	29	1.704	2.017	2.431	1.298	0.972	0.326	0.605	0.949	0.711
66	R-08	30	1.725	2.005	2.386	1.245	0.913	0.332	0.602	1.008	0.737
67	R-08	31	1.583	1.828	2.334	1.260	0.974	0.286	0.82	1.325	0.704
68	R-08	32	1.686	1.977	2.330	1.170	0.884	0.286	0.585	0.791	0.699
69	R-08	33	1.515	1.802	2.275	1.271	0.880	0.391	0.737	1.363	0.708
70	R-08	34	1.507	1.794	2.322	1.280	1.003	0.277	0.892	1.311	0.694
71	R-08	35	1.604	1.916	2.192	1.298	0.880	0.418	0.512	0.683	0.651
72	R-09	1	1.641	1.923	2.317	1.273	0.938	0.335	0.604	0.944	0.676
73	R-10	1	1.836	2.141	2.921	1.640	1.233	0.407	1.269	1.693	0.781
74	R-10	2	1.652	2.003	2.620	1.563	1.147	0.416	1.114	1.648	0.740
75	R-10	3	1.539	1.887	2.636	1.494	1.210	0.284	1.3	1.968	0.725
76	R-10	4	1.496	1.807	2.196	1.174	0.876	0.298	0.652	0.932	0.656

Shell of *Rhiostoma housei*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-12	1	1.856	2.199	2.741	1.677	1.314	0.363	1.122	1.774	0.857
2	R-13	1	2.133	2.483	3.006	1.794	1.36	0.434	1.059	1.816	0.89
3	R-13	2	2.194	2.576	3.025	1.807	1.172	0.535	1.077	1.418	0.897
4	R-13	3	2.246	2.569	3.011	1.903	1.288	0.615	1.075	1.492	0.876
5	R-13	4	2.152	2.545	2.95	1.834	1.314	0.52	1.008	1.52	0.908
6	R-13	5	2.124	2.47	2.914	1.831	1.338	0.493	1.127	1.445	0.851
7	R-13	6	2.233	2.608	3.05	1.631	1.16	0.471	0.885	1.145	0.917
8	R-14	1	2.068	2.427	2.819	1.598	1.132	0.466	0.75	1.236	0.885
9	R-14	2	1.886	2.184	2.741	1.502	1.144	0.358	0.885	1.352	0.827
10	R-15	1	1.99	2.303	2.754	1.804	1.282	0.522	0.936	1.214	0.844
11	R-15	2	1.948	2.235	2.791	1.673	1.273	0.4	1.054	1.472	0.839
12	R-15	3	1.906	2.218	2.754	1.703	1.212	0.491	0.981	1.276	0.816
13	R-16	1	2.079	2.438	2.852	1.474	1.064	0.41	0.564	0.847	0.852
14	R-16	2	2.066	2.477	2.91	1.561	1.193	0.368	0.925	1.215	0.828
15	R-16	3	1.98	2.399	2.776	1.523	1.076	0.447	0.714	1.067	0.85
16	R-16	4	1.963	2.324	2.743	1.572	1.15	0.422	0.942	1.178	0.793
17	R-16	5	1.932	2.272	2.622	1.469	1.032	0.437	0.604	0.841	0.8
18	R-16	6	2.213	2.662	3.068	1.701	1.197	0.504	0.971	1.156	0.894
19	R-16	7	2.061	2.416	2.979	1.593	1.203	0.39	0.996	1.215	0.894

Shell of *Rhiostoma housei* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
20	R-16	8	2.067	2.519	3.047	1.656	1.291	0.365	1.156	1.646	0.884
21	R-16	9	2.132	2.554	2.931	1.76	1.205	0.555	1.008	1.232	0.883
22	R-16	10	2.181	2.596	3.008	1.73	1.218	0.512	0.88	1.149	0.889
23	R-16	11	2.159	2.547	2.964	1.622	1.266	0.356	1.072	1.426	0.871
24	R-16	12	2.163	2.561	3.118	1.847	1.378	0.469	1.139	1.409	0.902
25	R-16	13	2.161	2.606	3.105	1.802	1.276	0.526	1.088	1.479	0.93
26	R-16	14	2.173	2.556	3.044	1.593	1.174	0.419	0.892	1.185	0.906
27	R-16	15	2.179	2.544	3.114	1.762	1.28	0.482	1.068	1.314	0.942
28	R-16	16	2.137	2.546	3.031	1.814	1.339	0.475	1.101	1.232	0.925
29	R-16	17	2.201	2.611	2.991	1.632	1.218	0.414	0.924	1.124	0.913
30	R-16	18	2.178	2.562	2.892	1.566	1.2	0.356	0.86	1.138	0.902
31	R-16	19	2.1	2.484	2.788	1.892	1.213	0.679	0.834	1.31	0.834
32	R-16	20	2.114	2.464	2.907	1.737	1.212	0.525	0.92	1.252	0.912
33	R-16	21	2.144	2.591	2.910	1.752	1.202	0.550	0.808	1.136	0.923
34	R-16	22	2.124	2.514	2.913	1.767	1.197	0.52	0.941	1.086	0.899
35	R-16	23	2.012	2.446	2.791	1.59	1.154	0.436	0.78	1.068	0.878
36	R-16	24	2.023	2.367	2.834	1.592	1.137	0.455	0.922	1.077	0.801
37	R-16	25	2.050	2.394	2.847	1.808	1.307	0.501	1.156	1.516	0.858
38	R-16	26	1.912	2.313	2.803	1.56	1.175	0.385	0.994	1.238	0.856
39	R-16	27	2.142	2.65	3.019	1.569	1.218	0.351	0.902	1.216	0.882
40	R-16	28	2.142	2.569	3.035	1.661	1.192	0.469	0.88	1.098	0.888
41	R-16	29	1.959	2.344	2.799	1.653	1.179	0.474	0.881	1.232	0.827
42	R-16	30	2.176	2.604	2.942	1.668	1.24	0.428	0.982	1.26	0.887
43	R-16	31	2.128	2.526	2.888	1.532	1.059	0.473	0.627	0.842	0.891
44	R-16	32	2.079	2.463	2.885	1.733	1.222	0.511	0.797	0.92	0.869
45	R-16	33	2.046	2.435	2.885	1.748	1.254	0.494	0.987	1.332	0.852
46	R-16	34	1.998	2.392	2.871	1.624	1.189	0.435	0.908	1.254	0.859
47	R-16	35	1.987	2.367	2.77	1.567	1.204	0.363	0.983	1.281	0.832
48	R-16	36	2.009	2.388	2.902	1.651	1.185	0.466	0.978	1.297	0.884
49	R-16	37	1.965	2.374	2.760	1.518	1.112	0.406	0.794	1.104	0.844
50	R-16	38	1.966	2.370	2.776	1.598	1.101	0.497	0.801	1.094	0.860
51	R-16	39	2.104	2.436	2.864	1.888	1.285	0.603	1.029	1.498	0.888
52	R-16	40	2.079	2.442	2.825	1.463	1.093	0.370	0.721	0.751	0.839
53	R-16	41	1.99	2.383	2.858	1.595	1.191	0.404	1.012	1.388	0.835
54	R-16	42	1.918	2.278	2.768	1.431	1.120	0.311	0.87	1.106	0.804
55	R-16	43	2.024	2.436	2.812	1.528	1.124	0.404	0.816	0.986	0.908
56	R-16	44	1.919	2.288	2.695	1.507	1.071	0.436	0.844	1.013	0.798

Shell of *Rhiostoma housei* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
57	R-16	45	2.064	2.439	2.863	1.626	1.162	0.464	0.923	1.176	0.846
58	R-16	46	2.074	2.437	2.906	1.816	1.264	0.552	0.858	1.28	0.894
59	R-16	47	2.143	2.536	2.906	1.694	1.172	0.522	0.723	0.917	0.837
60	R-16	48	1.954	2.349	2.794	1.446	1.068	0.378	0.799	1.031	0.822
61	R-16	49	1.954	2.337	2.816	1.395	1.076	0.319	0.833	1.141	0.871
62	R-16	50	1.882	2.236	2.574	1.358	1.002	0.356	0.551	0.703	0.819
63	R-16	51	2.000	2.324	2.76	1.582	1.164	0.418	0.794	1.113	0.854
64	R-16	52	1.912	2.284	2.726	1.540	1.149	0.391	0.73	1.082	0.837
65	R-16	53	1.878	2.201	2.68	1.621	1.205	0.416	1.019	1.249	0.779
66	R-16	54	1.946	2.256	2.628	1.544	1.144	0.400	0.747	1.234	0.843
67	R-16	55	1.918	2.272	2.719	1.632	1.108	0.524	0.79	1.205	0.738
68	R-16	56	1.990	2.322	2.688	1.624	1.130	0.494	0.738	0.925	0.786
69	R-16	57	1.921	2.303	2.549	1.506	1.070	0.436	0.567	0.775	0.788
70	R-16	58	1.824	2.232	2.592	1.591	1.108	0.483	0.779	0.987	0.819
71	R-16	59	1.980	2.363	2.790	1.545	1.085	0.460	0.795	0.958	0.825
72	R-16	60	2.090	2.319	2.696	1.641	1.131	0.510	0.797	0.992	0.831
73	R-16	61	1.880	2.286	2.596	1.406	1.070	0.336	0.606	0.929	0.739
74	R-16	62	1.939	2.273	2.694	1.482	1.090	0.392	0.805	0.921	0.844
75	R-16	63	1.926	2.249	2.637	1.535	1.078	0.457	0.664	0.793	0.815
76	R-16	64	1.989	2.386	2.687	1.614	1.067	0.547	0.709	1.015	0.849
77	R-16	65	1.850	2.165	2.568	1.400	0.960	0.440	0.736	0.968	0.777
78	R-16	66	1.880	2.297	2.647	1.484	1.038	0.446	0.694	0.814	0.798
79	R-16	67	2.000	2.412	2.782	1.647	1.138	0.509	0.784	1.084	0.842
80	R-16	68	1.834	2.223	2.661	1.491	1.078	0.413	0.833	1.036	0.800
81	R-16	69	1.982	2.378	2.670	1.578	1.050	0.528	0.649	0.797	0.833
82	R-16	70	1.852	2.204	2.535	1.390	0.950	0.440	0.589	0.65	0.801
83	R-16	71	1.841	2.299	2.508	1.496	1.054	0.442	0.729	0.86	0.784
84	R-16	72	1.857	2.267	2.590	1.432	1.034	0.398	0.638	0.832	0.856
85	R-16	73	1.947	2.311	2.738	1.542	1.104	0.438	0.827	1.11	0.820
86	R-17	1	2.132	2.516	2.761	1.499	1.018	0.481	0.496	0.756	0.846
87	R-17	2	2.123	2.494	2.733	1.37	1.001	0.369	0.518	0.724	0.822
88	R-17	3	1.984	2.328	2.540	1.394	0.934	0.460	0.466	0.711	0.800
89	R-18	1	2.094	2.530	2.870	1.520	1.127	0.393	0.732	1.006	0.889
90	R-18	2	2.079	2.596	2.929	1.736	1.259	0.477	0.94	1.266	0.906
91	R-18	3	2.084	2.593	2.824	1.600	1.123	0.477	0.735	0.844	0.897
92	R-18	4	2.077	2.490	2.886	1.478	1.120	0.358	0.742	0.87	0.849
93	R-18	5	2.017	2.380	2.741	1.638	1.119	0.519	0.671	1.018	0.816

Shell of *Rhiostoma housei* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
94	R-18	6	1.950	2.367	2.572	1.444	1.002	0.442	0.528	0.564	0.786
95	R-18	7	1.974	2.305	2.587	1.490	0.970	0.520	0.724	0.634	0.807
96	R-18	8	1.803	2.153	2.516	1.334	0.971	0.363	0.518	0.755	0.804
97	R-18	9	2.336	2.766	3.181	1.709	1.211	0.498	0.823	1.104	0.961
98	R-18	10	2.216	2.589	3.078	1.960	1.336	0.624	1.133	1.601	0.938
99	R-18	11	2.127	2.575	2.981	1.660	1.216	0.444	0.868	1.2	0.886
100	R-18	12	2.086	2.557	2.938	1.672	1.208	0.464	0.968	1.226	0.878
101	R-18	13	2.032	2.400	2.812	1.768	1.235	0.533	0.91	1.156	0.866
102	R-18	14	1.990	2.363	2.818	1.734	1.241	0.493	0.951	1.182	0.849
103	R-18	15	2.000	2.340	2.924	1.846	1.418	0.428	1.077	1.727	0.892
104	R-18	16	2.231	2.660	2.914	1.696	1.158	0.538	0.667	0.834	0.887
105	R-18	17	2.078	2.431	2.911	1.583	1.178	0.405	0.96	1.234	0.859
106	R-18	18	2.131	2.507	2.864	1.855	1.248	0.607	0.814	1.174	0.904
107	R-18	19	2.118	2.532	2.96	1.781	1.282	0.499	1.007	1.494	0.859
108	R-18	20	2.112	2.507	2.888	1.674	1.160	0.514	0.87	1.165	0.894
109	R-18	21	1.953	2.363	2.868	1.663	1.183	0.480	0.917	1.107	0.847
110	R-18	22	2.079	2.505	3.017	1.707	1.262	0.445	1.025	1.329	0.895
111	R-18	23	2.106	2.597	2.909	1.639	1.196	0.443	0.836	1.052	0.878
112	R-18	24	2.058	2.445	2.974	1.749	1.342	0.407	1.034	1.381	0.908
113	R-18	25	2.052	2.402	2.888	1.772	1.309	0.463	1.002	1.536	0.860
114	R-18	26	2.094	2.481	2.930	1.802	1.290	0.512	0.998	1.15	0.890
115	R-18	27	2.082	2.493	2.836	1.638	1.142	0.496	0.76	1.076	0.870
116	R-18	28	2.071	2.469	2.902	1.635	1.177	0.458	0.779	1.025	0.874
117	R-18	29	2.012	2.428	2.825	1.521	1.089	0.432	0.797	0.942	0.886
118	R-18	30	1.972	2.381	2.758	1.663	1.120	0.543	0.788	0.997	0.839
119	R-18	31	2.124	2.507	2.917	1.707	1.232	0.475	1.022	1.308	0.893
120	R-18	32	1.984	2.328	2.764	1.739	1.260	0.479	0.992	1.391	0.846
121	R-18	33	1.931	2.294	2.840	1.576	1.198	0.378	1.073	1.514	0.841
122	R-18	34	1.870	2.205	2.708	1.566	1.150	0.416	0.849	1.157	0.836
123	R-18	35	2.051	2.451	2.816	1.736	1.216	0.520	0.905	1.222	0.868
124	R-18	36	2.080	2.509	2.916	1.567	1.144	0.432	0.803	0.896	0.897
125	R-18	37	2.100	2.523	2.821	1.527	1.112	0.415	0.666	0.744	0.896
126	R-18	38	2.042	2.439	2.851	1.526	1.113	0.413	0.895	1.092	0.822
127	R-18	39	2.164	2.504	2.838	1.842	1.236	0.606	0.9	1.22	0.866
128	R-18	40	2.080	2.480	2.909	1.620	1.218	0.402	0.895	1.221	0.890
129	R-18	41	2.046	2.430	2.829	1.649	1.179	0.470	0.886	1.23	0.860
130	R-18	42	2.099	2.490	2.830	1.711	1.214	0.497	0.793	1.218	0.845

Shell of *Rhiostoma housei* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
131	R-18	43	1.920	2.286	2.676	1.544	1.142	0.402	0.826	1.132	0.826
132	R-18	44	2.011	2.350	2.686	1.567	1.127	0.440	0.704	1.074	0.851
133	R-18	45	1.904	2.249	2.668	1.712	1.176	0.536	0.872	1.14	0.820
134	R-18	46	2.006	2.363	2.806	1.713	1.264	0.449	0.993	1.293	0.867
135	R-18	47	2.004	2.350	2.754	1.551	1.129	0.422	0.798	1.392	0.866
136	R-18	48	2.038	2.400	2.722	1.593	1.148	0.445	0.66	0.88	0.842
137	R-18	49	2.000	2.380	2.736	1.649	1.172	0.477	0.773	0.941	0.852
138	R-18	50	2.024	2.456	2.797	1.555	1.154	0.401	0.763	1.05	0.861
139	R-18	51	1.890	2.277	2.706	1.434	1.123	0.311	0.763	0.928	0.850
140	R-18	52	1.962	2.366	2.746	1.593	1.115	0.478	0.747	0.946	0.813
141	R-18	53	1.814	2.122	2.512	1.510	1.096	0.414	0.838	1.109	0.806
142	R-18	54	1.940	2.248	2.597	1.629	1.090	0.539	0.712	0.89	0.809
143	R-18	55	2.023	2.348	2.712	1.660	1.150	0.510	0.811	0.86	0.870
144	R-18	56	1.919	2.252	2.741	1.416	1.111	0.305	0.873	0.971	0.817
145	R-18	57	1.970	2.351	2.694	1.580	1.114	0.466	0.752	0.878	0.825
146	R-18	58	1.885	2.232	2.698	1.580	1.192	0.388	1.01	1.365	0.802
147	R-18	59	1.908	2.223	2.728	1.536	1.193	0.343	0.955	1.321	0.833
148	R-18	60	1.948	2.316	2.745	1.588	1.148	0.440	0.884	1.11	0.801
149	R-18	61	1.848	2.157	2.497	1.574	1.096	0.478	0.695	0.733	0.805
150	R-18	62	1.844	2.188	2.579	1.469	1.093	0.376	0.817	1.257	0.814
151	R-18	63	1.825	2.060	2.512	1.768	1.166	0.602	1.025	1.3	0.789
152	R-18	64	1.937	2.313	2.645	1.533	1.075	0.458	0.627	0.863	0.822
153	R-18	65	1.918	2.313	2.620	1.518	1.071	0.447	0.611	0.745	0.782
154	R-18	66	1.906	2.216	2.627	1.610	1.095	0.515	0.801	1.025	0.813
155	R-18	67	1.864	2.200	2.535	1.564	1.046	0.518	0.604	0.784	0.850
156	R-18	68	1.862	2.196	2.575	1.450	1.054	0.396	0.766	1.004	0.811
157	R-18	69	1.889	2.239	2.528	1.452	1.012	0.440	0.553	0.935	0.800
158	R-18	70	1.850	2.154	2.458	1.539	1.042	0.497	0.629	0.988	0.816
159	R-19	1	1.767	2.059	2.325	1.369	0.962	0.407	0.574	0.744	0.762
160	R-19	2	1.840	2.146	2.433	1.490	0.983	0.517	0.466	0.828	0.775
161	R-19	3	1.842	2.131	2.429	1.335	0.949	0.386	0.728	0.96	0.754
162	R-19	4	2.068	2.389	2.683	1.644	1.123	0.521	0.758	0.95	0.884
163	R-19	5	1.984	2.276	2.576	1.604	1.126	0.478	0.803	1.008	0.810
164	R-19	6	1.997	2.322	2.631	1.710	1.122	0.588	0.829	1.076	0.855
165	R-19	7	2.086	2.478	2.858	1.574	1.050	0.524	0.786	1.146	0.822
166	R-19	8	1.882	2.268	2.515	1.496	1.025	0.471	0.632	0.718	0.798
167	R-19	9	1.932	2.297	2.568	1.511	1.044	0.467	-	-	0.825

Shell of *Rhiostoma housei* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
168	R-19	10	1.890	2.197	2.676	1.597	1.109	0.470	0.916	1.088	0.833
169	R-19	11	2.041	2.335	2.734	1.595	1.021	0.574	0.912	1.265	0.797
170	R-19	12	2.030	2.336	2.668	1.506	1.052	0.454	0.735	1.046	0.825
171	R-19	13	2.082	2.375	2.785	1.785	1.172	0.613	0.932	1.062	0.838
172	R-19	14	2.067	2.386	2.794	1.698	1.204	0.494	1.001	1.263	0.879
173	R-19	15	2.010	2.410	2.796	1.849	1.242	0.607	1.022	1.332	0.868
174	R-19	16	2.112	2.458	2.839	1.766	1.221	0.545	0.937	1.12	0.858
175	R-19	17	2.115	2.432	2.884	1.901	1.329	0.572	1.092	1.554	0.870
176	R-19	18	2.187	2.537	2.956	1.786	1.184	0.602	0.901	1.427	0.854
177	R-19	19	2.110	2.488	2.748	1.462	1.053	0.406	0.667	0.833	0.860
178	R-20	1	2.191	2.674	3.088	1.708	1.198	0.510	1.006	1.148	0.875
179	R-20	2	2.253	2.642	3.086	1.806	1.286	0.520	0.924	1.226	0.928
180	R-20	3	2.001	2.406	2.902	1.516	1.107	0.409	0.906	1.015	0.860
181	R-20	4	2.018	2.411	2.801	1.531	1.082	0.449	0.75	0.945	0.864
182	R-20	5	1.883	2.213	2.690	1.582	1.178	0.404	0.851	1.412	0.812
183	R-20	6	2.058	2.398	2.738	1.624	1.078	0.546	0.698	0.908	0.854
184	R-20	7	1.929	2.326	2.638	1.528	1.041	0.487	0.652	0.995	0.829
185	R-20	8	1.805	2.142	2.517	1.544	1.094	0.450	0.863	0.988	0.818
186	R-21	1	2.260	2.696	3.285	1.708	1.250	0.458	1.218	1.475	0.965
187	R-21	2	2.221	2.573	3.136	1.858	1.344	0.514	1.096	1.304	0.957
188	R-21	3	2.135	2.466	3.062	2.070	1.537	0.533	1.42	1.976	0.960
189	R-21	4	2.032	2.406	2.879	1.732	1.224	0.508	0.971	1.229	0.878

Shell of *Rhiostoma jalorensis*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-23	1	1.718	2.027	2.742	1.549	1.175	0.374	1.107	1.718	0.780
2	R-23	2	1.732	2.005	2.679	1.640	1.250	0.390	1.136	1.596	0.794
3	R-23	3	1.667	1.942	2.672	1.447	1.134	0.313	1.038	1.56	0.814
4	R-23	4	1.632	1.949	2.612	1.366	1.075	0.291	1.002	1.507	0.774
5	R-24	1	1.761	2.078	2.826	1.656	1.264	0.392	1.191	1.68	0.792
6	R-24	2	1.644	1.908	2.684	1.566	2.232	0.334	1.106	1.737	0.762
7	R-24	3	1.701	2.018	2.616	1.484	1.149	0.335	1.103	1.442	0.767
8	R-24	4	1.642	1.856	2.627	1.616	1.290	0.326	1.244	1.732	0.693
9	R-24	5	1.638	1.920	2.541	1.359	1.030	0.329	0.934	1.282	0.728
10	R-24	6	1.615	1.938	2.562	1.387	1.098	0.289	1.063	1.718	0.721
11	R-24	7	1.610	1.866	2.552	1.526	1.148	0.378	1.017	1.46	0.712



Shell of *Rhiostoma jalorensis* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
12	R-24	8	1.577	1.804	2.485	1.458	1.112	0.346	1.027	1.36	0.732
13	R-24	9	1.575	1.965	2.437	1.173	0.941	0.232	0.854	1.204	0.692
14	R-24	10	1.620	1.623	2.514	1.194	0.942	0.252	0.82	1.185	0.763
15	R-24	11	1.550	1.840	2.447	1.314	1.012	0.302	0.949	1.266	0.767
16	R-24	12	1.660	1.884	2.475	1.522	1.125	0.397	0.946	1.32	0.754
17	R-24	13	1.193	1.777	2.402	1.376	1.130	0.246	0.988	1.349	0.730
18	R-25	1	1.898	2.176	2.941	1.664	1.203	0.461	1.046	1.597	0.824
19	R-25	2	1.641	1.928	2.754	1.838	1.477	0.361	1.335	2.115	0.700
20	R-25	3	1.633	1.905	2.816	1.872	1.550	0.322	1.424	1.994	0.774
21	R-25	4	1.634	1.987	2.686	1.584	1.245	0.339	1.286	1.837	0.713
22	R-25	5	1.605	1.923	2.600	1.678	1.317	0.361	1.246	1.754	0.790
23	R-25	6	1.582	1.810	2.562	1.932	1.562	0.370	1.369	1.8	0.752
24	R-25	7	1.658	1.924	2.612	1.566	1.170	0.396	1.086	1.523	0.726
25	R-25	8	1.565	1.870	2.715	1.550	1.245	0.305	1.245	1.61	0.740
26	R-25	9	1.549	1.833	2.569	1.638	1.276	0.362	1.173	1.744	0.756
27	R-25	10	1.623	1.882	2.602	1.884	1.461	0.423	1.296	1.771	0.754
28	R-25	11	1.586	1.886	2.513	1.615	1.230	0.385	1.292	2.012	0.728
29	R-25	12	1.592	1.828	2.602	1.757	1.301	0.456	1.161	1.57	0.700
30	R-25	13	1.537	1.791	2.640	1.674	1.242	0.432	1.302	1.858	0.694
31	R-25	14	1.573	1.854	2.568	1.654	1.250	0.404	1.042	1.482	0.740
32	R-25	15	1.479	1.716	2.394	1.470	1.097	0.373	0.94	1.385	0.718
33	R-25	16	1.489	1.800	2.409	1.538	1.110	0.428	1.055	1.484	0.685
34	R-25	17	1.496	1.767	2.469	1.471	1.052	0.419	0.858	1.249	0.690
35	R-25	18	1.568	1.822	2.623	1.649	1.221	0.428	1.063	1.82	0.719
36	R-25	19	1.531	1.783	2.416	1.744	1.331	0.413	1.043	1.654	0.725
37	R-25	20	1.556	1.832	2.500	1.530	1.170	0.360	0.969	1.505	0.734
38	R-25	21	1.533	1.746	2.492	1.544	1.158	0.386	1.035	1.565	0.712
39	R-25	22	1.484	1.754	2.464	1.376	1.028	0.348	0.914	1.279	0.705
40	R-25	23	1.481	1.726	2.415	1.460	1.124	0.336	1.029	1.488	0.694
41	R-25	24	1.533	1.758	2.301	1.397	0.986	0.411	0.815	1.283	0.677
42	R-25	25	1.489	1.727	2.335	1.446	1.032	0.414	0.892	1.209	0.668
43	R-25	26	1.518	1.758	2.413	1.425	1.060	0.365	0.974	1.192	0.706
44	R-25	27	1.460	1.745	2.332	1.514	1.098	0.416	0.895	1.382	0.693
45	R-25	28	1.494	1.774	2.420	1.499	1.138	0.361	0.989	1.234	0.630
46	R-25	29	1.420	1.649	2.312	1.404	1.132	0.272	0.994	1.471	0.692
47	R-25	30	1.477	1.751	2.498	1.516	1.130	0.386	0.975	1.528	0.714
48	R-25	31	1.440	1.670	2.349	1.435	1.028	0.407	0.854	1.464	0.667

Shell of *Rhiostoma jalorensis* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
49	R-25	32	1.447	1.658	2.264	1.444	1.109	0.335	1.05	1.84	0.688
50	R-25	33	1.424	1.681	2.247	1.340	1.038	0.302	0.945	1.246	0.657
51	R-25	34	1.506	1.742	2.292	1.424	1.007	0.417	0.88	1.189	0.714
52	R-25	35	1.452	1.716	2.248	1.364	1.014	0.350	0.856	1.232	0.641
53	R-25	36	1.406	1.704	2.238	1.404	1.070	0.334	0.944	1.486	0.630
54	R-25	37	1.590	1.758	2.368	1.494	1.117	0.377	1.014	1.402	0.654
55	R-25	38	1.473	1.761	2.257	1.473	1.033	0.440	0.835	1.356	0.701
56	R-25	39	1.479	1.757	2.244	1.186	0.878	0.308	0.729	1.154	0.698
57	R-25	40	1.440	1.682	2.286	1.474	1.116	0.358	0.974	1.375	0.664
58	R-25	41	1.442	1.644	2.216	1.372	0.969	0.403	0.856	1.198	0.648
59	R-26	1	1.912	2.292	3.009	1.758	1.423	0.335	1.349	1.826	0.786
60	R-26	2	1.858	2.184	2.998	1.842	1.451	0.391	1.234	1.913	0.862
61	R-26	3	1.837	2.138	3.018	1.643	1.377	0.266	1.218	1.878	0.854
62	R-26	4	1.803	2.077	2.999	1.742	1.346	0.396	1.306	2.048	0.863
63	R-26	5	1.796	2.126	2.851	1.590	1.258	0.332	1.027	1.567	0.846
64	R-26	6	1.792	2.096	2.903	1.663	1.328	0.335	1.232	1.864	0.822
65	R-26	7	1.852	2.160	3.000	1.575	1.251	0.324	1.149	1.626	0.795
66	R-26	8	1.826	2.157	2.996	1.770	1.314	0.456	1.267	1.752	0.850
67	R-26	9	1.770	2.120	2.936	1.437	1.108	0.329	1.168	1.583	0.871
68	R-26	10	1.807	2.099	2.88	1.722	1.392	0.330	1.372	1.856	0.824
69	R-26	11	1.871	2.169	2.916	1.694	1.294	0.400	1.181	1.841	0.860
70	R-26	12	1.725	2.037	2.819	1.695	1.340	0.355	1.126	1.844	0.830
71	R-26	13	1.680	2.009	2.785	1.409	1.150	0.259	1.131	1.63	0.791
72	R-26	14	1.736	2.093	2.859	1.542	1.172	0.370	1.138	1.586	0.793
73	R-26	15	1.694	1.976	2.719	1.591	1.278	0.313	1.111	1.589	0.802
74	R-26	16	1.616	1.940	2.993	1.782	1.411	0.371	1.494	2.021	0.793
75	R-26	17	1.773	2.045	2.754	1.522	1.152	0.370	1.03	1.348	0.770
76	R-26	18	1.679	1.947	2.636	1.886	1.392	0.494	1.144	1.847	0.756
77	R-26	19	1.699	2.042	2.716	1.363	1.050	0.313	0.91	1.383	0.775
78	R-26	20	1.505	1.717	2.537	1.473	1.160	0.313	1.114	1.626	0.728
79	R-27	1	1.567	1.891	2.600	1.627	1.264	0.363	1.249	1.904	0.718
80	R-27	2	1.447	0.695	2.191	1.326	0.948	0.368	0.74	1.074	0.665
81	R-27	3	1.629	1.944	2.694	1.690	1.380	0.310	1.298	2.098	0.740
82	R-27	4	1.612	1.898	2.786	1.797	1.480	0.317	1.588	2.323	0.733
83	R-27	5	1.742	1.980	2.777	1.793	1.439	0.354	1.236	1.916	0.801
84	R-27	6	1.656	1.980	2.872	1.883	1.482	0.401	1.481	2.126	0.734
85	R-27	7	1.650	1.981	2.738	1.546	1.204	0.342	1.234	1.639	0.727

Shell of *Rhiostoma jalorensis* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
86	R-27	8	1.577	1.852	2.610	1.603	1.210	0.393	1.147	1.758	0.701
87	R-27	9	1.657	1.955	2.782	1.647	1.331	0.316	1.346	1.742	0.711
88	R-27	10	1.756	2.047	2.632	1.768	1.329	0.439	1.021	1.542	0.758
89	R-27	11	1.604	1.948	2.632	1.810	1.408	0.402	1.363	1.912	0.730
90	R-27	12	1.636	1.900	2.629	1.712	1.313	0.399	1.216	1.732	0.735
91	R-27	13	1.676	1.910	2.735	1.712	1.353	0.359	1.342	1.762	0.741
92	R-27	14	1.642	1.902	2.596	1.938	1.488	0.450	1.225	1.874	0.726
93	R-27	15	1.635	1.962	2.584	1.678	1.280	0.398	1.142	1.494	0.727
94	R-27	16	1.564	1.832	2.737	1.610	1.349	0.261	1.312	1.986	0.747
95	R-27	17	1.641	1.916	2.556	1.451	1.076	0.375	0.977	1.613	0.728
96	R-27	18	1.623	1.883	2.605	1.564	1.274	0.290	1.259	1.647	0.728
97	R-27	19	1.602	1.839	2.606	1.535	1.229	0.306	1.134	1.724	0.730
98	R-27	20	1.608	1.852	2.503	1.637	1.276	0.361	1.06	1.601	0.713
99	R-27	21	1.577	1.896	2.447	1.438	1.132	0.306	0.958	1.569	0.686
100	R-27	22	1.555	1.834	2.383	1.440	1.091	0.349	0.949	1.364	0.711
101	R-27	23	1.631	1.951	2.618	1.504	1.180	0.324	1.208	1.717	0.710
102	R-27	24	1.580	1.820	2.311	1.899	1.377	0.522	1.125	1.634	0.678
103	R-27	25	1.487	1.748	2.337	1.461	1.073	0.388	1.069	1.38	0.749
104	R-27	26	1.633	1.915	2.617	1.568	1.216	0.352	1.21	1.776	0.747
105	R-27	27	1.617	1.894	2.549	1.668	1.372	0.296	1.397	1.969	0.722
106	R-27	28	1.530	1.876	2.481	1.442	1.170	0.272	1.075	1.567	0.719
107	R-27	29	1.512	1.816	2.494	1.794	1.460	0.334	1.375	2.075	0.721
108	R-27	30	1.586	1.868	2.411	1.599	1.232	0.367	0.995	1.507	0.672
109	R-27	31	1.479	1.716	2.496	1.552	1.267	0.285	1.227	1.823	0.705
110	R-27	32	1.629	1.876	2.512	1.617	1.244	0.373	1.034	1.69	0.688
111	R-27	33	1.558	1.800	2.498	1.746	1.359	0.387	1.132	1.806	0.718
112	R-27	34	1.573	1.794	2.429	1.530	1.152	0.378	1.004	1.403	0.662
113	R-27	35	1.490	1.770	2.374	1.532	1.152	0.380	1.013	1.449	0.722
114	R-27	36	1.527	1.837	2.542	1.582	1.296	0.286	1.19	1.821	0.700
115	R-27	37	1.450	1.673	2.572	1.630	1.268	0.362	1.327	1.9	0.683
116	R-27	38	1.461	1.714	2.303	1.328	1.007	0.321	0.901	1.265	0.666
117	R-27	39	1.518	1.723	2.449	1.670	1.324	0.346	1.204	1.787	0.700
118	R-27	40	1.458	1.718	2.230	1.380	1.056	0.324	0.954	1.426	0.656
119	R-27	41	1.542	1.758	2.280	1.396	1.070	0.326	0.863	1.241	0.643
120	R-27	42	1.480	1.714	2.287	1.342	1.012	0.330	0.732	1.118	0.670
121	R-27	43	1.504	1.806	2.394	1.430	1.088	0.342	0.87	1.209	0.692
122	R-27	44	1.505	1.778	2.340	1.458	1.086	0.372	0.916	1.348	0.638

Shell of *Rhiostoma jalorensis* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
123	R-27	45	1.546	1.844	2.417	1.426	1.067	0.359	0.945	1.498	0.684
124	R-27	46	1.427	1.674	2.206	1.642	1.274	0.368	1.15	1.894	0.594
125	R-27	47	1.418	1.681	2.265	1.270	1.004	0.266	0.941	1.442	0.654
126	R-27	48	1.512	1.711	2.191	1.582	1.078	0.504	0.823	1.27	0.660
127	R-27	49	1.507	1.743	2.188	1.364	0.956	0.408	0.751	1.1	0.636
128	R-27	50	1.382	1.641	2.318	1.262	1.025	0.237	1.024	1.5	0.647
129	R-27	51	1.442	1.690	2.225	1.437	1.100	0.337	0.908	1.308	0.622
130	R-27	52	1.458	1.743	2.260	1.206	0.937	0.269	0.83	1.176	0.658
131	R-27	53	1.452	1.672	2.162	1.229	0.947	0.282	0.753	1.116	0.648
132	R-28	1	1.574	1.845	2.674	1.588	1.262	0.326	1.263	1.626	0.718
133	R-28	2	1.554	1.821	1.588	1.398	1.118	0.280	1.097	1.308	0.694
134	R-28	3	1.514	1.846	2.583	1.499	1.216	0.283	1.046	1.622	0.712
135	R-28	4	1.468	1.768	2.752	1.548	1.315	0.233	1.51	2.08	0.712
136	R-28	5	1.510	1.802	2.655	1.507	1.395	0.112	1.25	1.89	0.724
137	R-28	6	1.543	1.804	2.498	1.406	1.132	0.274	1	1.339	0.679
138	R-28	7	1.550	1.880	2.472	1.423	1.147	0.276	1.079	1.498	0.701
139	R-28	8	1.556	1.835	2.458	1.365	1.037	0.328	1.015	1.263	0.696
140	R-28	9	1.494	1.793	2.344	1.125	0.884	0.241	0.694	1.059	0.663
141	R-28	10	1.429	1.716	2.617	1.440	1.127	0.313	1.268	1.651	0.689
142	R-28	11	1.399	1.648	2.360	1.461	1.191	0.270	0.986	1.444	0.684
143	R-28	12	1.450	1.696	2.261	1.241	0.945	0.296	0.82	1.208	0.684
144	R-28	13	1.408	1.672	2.240	1.258	0.980	0.278	0.821	1.218	0.644
145	R-28	14	1.384	1.653	2.291	1.435	1.148	0.287	0.991	1.37	0.692
146	R-28	15	1.415	1.688	2.249	1.289	0.988	0.301	0.88	1.301	0.662
147	R-28	16	1.368	1.595	2.220	1.186	0.978	0.208	0.884	1.198	0.631

Shell of *Rhiostoma samuiense*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-32	1	1.442	1.675	2.251	1.154	0.971	0.183	0.930	1.215	0.668
2	R-33	1	1.450	1.670	2.344	1.363	1.084	0.279	1.098	1.490	0.716
3	R-33	2	1.598	1.775	2.354	1.402	1.084	0.318	0.965	1.210	0.673
4	R-34	1	1.466	1.729	2.186	1.278	0.949	0.329	0.757	1.122	0.642
5	R-34	2	1.377	1.636	2.041	1.156	0.877	0.279	0.656	0.936	0.612
6	R-34	3	1.469	1.740	2.359	1.327	1.016	0.311	0.756	1.528	0.700
7	R-34	4	1.460	1.722	2.100	1.164	0.847	0.317	0.635	0.885	0.640
8	R-34	5	1.411	1.667	1.960	1.024	0.757	0.267	0.410	0.644	0.627

Shell of *Rhiostoma samuiense* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
9	R-34	6	1.473	1.693	2.154	1.236	0.912	0.324	0.612	1.113	0.656
10	R-34	7	1.349	1.582	2.014	1.155	0.842	0.313	0.649	0.951	0.635
11	R-34	8	1.422	1.649	2.076	1.088	0.808	0.280	0.605	0.903	0.609
12	R-35	1	1.417	1.686	2.309	1.326	1.101	0.225	0.940	1.442	0.650
13	R-35	2	1.405	1.636	2.145	1.395	1.136	0.259	0.964	1.525	0.650
14	R-35	3	1.332	1.564	1.907	1.006	0.764	0.242	0.404	0.770	0.569
15	R-35	4	1.428	1.691	2.254	1.260	0.985	0.275	0.821	1.278	0.684

Shell of *Rhiostoma hainesi*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-36	1	1.866	2.25	3.71	2.623	2.085	0.538	1.956	3.535	1.106
2	R-36	2	1.806	2.155	3.322	2.159	1.693	0.466	1.498	2.082	1.075
3	R-36	3	2.221	2.698	3.449	2.825	2.15	0.675	1.917	3.374	1.117
4	R-36	4	1.927	2.464	3.319	3.364	2.728	0.636	2.916	4.208	1.13
5	R-36	5	2.076	2.448	4.188	2.916	2.644	0.272	2.785	4.398	1.223
6	R-36	6	2.169	2.579	3.998	2.57	2.142	0.428	1.975	3.529	1.132
7	R-36	7	2.085	2.396	3.848	2.498	1.888	0.61	1.847	3.216	1.08
8	R-36	8	2.052	2.469	3.822	2.554	2.052	0.502	2.195	3.788	1.113
9	R-36	9	2.067	2.362	3.975	2.727	2.038	0.419	2.261	3.743	1.086
10	R-36	10	1.956	2.31	3.799	2.553	1.899	0.641	2.228	3.408	1.031
11	R-36	11	2.282	2.666	3.701	2.138	1.727	0.411	1.523	2.665	1.109
12	R-36	12	2.102	2.41	3.874	3.102	2.592	0.51	2.631	3.622	1.072
13	R-36	13	1.953	2.441	3.832	2.44	1.899	0.641	2.278	3.516	1.025
14	R-36	14	1.927	2.361	4.069	2.766	2.268	0.498	2.367	3.969	1.15
15	R-36	15	1.932	2.234	3.944	2.318	1.944	0.374	2.241	3.52	1.055
16	R-36	16	1.838	2.257	3.843	2.635	2.338	0.297	2.497	4.096	1.009
17	R-36	17	2.217	2.594	3.793	2.429	2.077	0.352	1.764	3.287	1.102
18	R-36	18	2.015	2.349	3.587	2.159	1.757	0.402	1.695	2.96	1.032
19	R-36	19	2.03	2.351	3.797	2.298	1.791	0.507	1.764	3.268	1.021
20	R-36	20	1.989	2.504	3.731	2.6	2.118	0.482	1.881	2.72	1.04
21	R-36	21	1.933	2.335	3.762	2.852	2.247	0.605	2.243	3.543	1.038
22	R-36	22	1.978	2.283	3.591	2.441	2.039	0.402	1.97	2.965	0.964
23	R-36	23	2.018	2.416	3.887	2.576	2.098	0.478	2.149	3.557	1.094
24	R-36	24	1.871	2.351	3.373	2.162	1.692	0.47	1.788	3.105	1.01
25	R-36	25	1.807	2.141	3.748	2.512	2.069	0.443	2.549	3.594	1.017
26	R-36	26	1.833	2.241	3.401	2.244	1.849	0.395	1.97	2.624	1.029

Shell of *Rhiostoma hainesi* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
27	R-36	27	1.932	2.298	3.414	1.994	1.463	0.531	1.216	2.052	1.013
28	R-36	28	1.884	2.199	3.375	2.168	1.691	0.477	1.505	2.637	0.943
29	R-36	29	1.884	2.126	3.282	2.08	1.634	0.446	1.375	2.433	0.957
30	R-36	30	2.016	2.322	3.357	1.882	1.433	0.449	1.165	1.97	1.008
31	R-36	31	1.978	2.296	3.542	2.476	1.823	0.603	1.801	2.91	1.023
32	R-36	32	1.99	2.341	3.557	2.316	1.86	0.456	1.699	2.794	1.023
33	R-36	33	1.899	2.246	3.332	2.072	1.636	0.436	1.479	2.51	1.011
34	R-36	34	1.995	2.376	3.575	2.327	1.944	0.383	1.703	3.025	1.023
35	R-37	1	2.069	2.448	3.454	2.128	1.604	0.524	1.272	2.262	0.999
36	R-38	1	1.916	2.297	3.392	2.212	1.724	0.488	1.632	2.419	1.037
37	R-38	2	1.97	2.167	3.286	2.364	1.845	0.519	1.683	2.868	0.971
38	R-38	3	1.912	2.192	3.334	2.258	1.874	0.484	1.78	2.753	0.932
39	R-38	4	1.821	2.136	3.238	2.04	1.564	0.476	1.484	2.115	0.904
40	R-38	5	1.819	2.117	3.067	2.382	1.81	0.572	1.607	2.846	0.905
41	R-38	6	1.906	2.186	3.042	2.046	1.468	0.578	1.213	2.118	0.891
42	R-38	7	1.735	2.016	3.19	2.272	1.765	0.507	1.849	2.918	0.928
43	R-38	8	1.733	2.102	3.138	2.254	1.765	0.489	1.669	2.536	0.903
44	R-38	9	1.754	2.054	3.228	2.365	1.925	0.44	1.894	2.999	0.968
45	R-38	10	1.827	2.156	3.093	1.956	1.516	0.44	1.079	2.1	0.984
46	R-38	11	1.657	1.93	2.989	2.162	1.81	0.352	1.694	1.902	0.888
47	R-38	12	1.729	1.968	2.992	2.24	1.718	0.522	1.544	2.588	0.909
48	R-38	13	1.719	1.956	2.84	2.106	1.169	0.487	1.464	2.555	0.825
49	R-38	14	1.622	1.901	2.748	1.847	1.377	0.47	1.187	1.856	0.874
50	R-38	15	1.657	1.906	2.786	1.871	1.452	0.419	1.168	2.115	0.846
51	R-38	16	1.679	1.946	2.768	1.885	1.416	0.469	1.248	1.924	0.856

Shell of *Rhiostoma* sp.1

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-41	1	1.507	1.777	2.816	1.618	1.401	0.217	1.585	2.141	0.707
2	R-41	2	1.620	1.917	2.602	1.471	1.146	0.325	1.112	1.453	0.692
3	R-41	3	1.528	1.788	2.519	1.464	1.132	0.332	1.061	1.605	0.698
4	R-41	4	1.400	1.658	2.485	1.451	1.172	0.279	1.315	1.738	0.710
5	R-41	5	1.360	1.617	2.329	1.612	1.267	0.345	1.133	1.812	0.657
6	R-42	1	1.398	1.626	1.995	1.063	0.818	0.245	0.738	0.977	0.590
7	R-43	1	1.537	1.809	2.231	1.254	0.925	0.329	0.735	0.952	0.672
8	R-43	2	1.446	1.736	2.400	1.561	1.184	0.377	1.229	1.576	0.679

Shell of *Rhiostoma* sp.1 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
9	R-44	1	1.490	1.762	2.258	1.234	0.950	0.284	0.949	1.134	0.648
10	R-44	2	1.361	1.598	2.186	1.400	1.025	0.375	0.99	1.377	0.641
11	R-44	3	1.479	1.720	2.208	1.279	0.990	0.289	0.924	1.174	0.647
12	R-44	4	1.371	1.594	2.088	1.216	0.923	0.293	0.883	1.139	0.624
13	R-44	5	1.266	1.525	1.995	1.086	0.846	0.240	0.886	1.023	0.576
14	R-45	1	1.646	1.959	2.444	1.312	0.973	0.339	0.92	1.318	0.714
15	R-45	2	1.588	1.970	2.489	1.569	1.193	0.376	1.152	1.717	0.674
16	R-45	3	1.515	1.778	2.359	1.303	1.014	0.289	1.083	1.371	0.703
17	R-45	4	1.486	1.706	2.292	1.308	1.021	0.287	0.982	1.323	0.664
18	R-45	5	1.457	1.742	2.155	1.277	0.940	0.337	0.733	1.21	0.660
19	R-45	6	1.449	1.716	2.146	1.134	0.844	0.290	0.707	1.027	0.606
20	R-45	7	1.380	1.650	2.111	1.146	0.891	0.255	0.903	1.232	0.621
21	R-45	8	1.396	1.652	2.000	1.219	0.914	0.305	0.746	1.064	0.622
22	R-45	9	1.396	1.655	2.030	1.135	0.864	0.271	1.262	1.031	0.641
23	R-45	10	1.378	1.622	2.025	1.213	0.907	0.306	0.754	1.014	0.629
24	R-45	11	1.380	1.649	2.000	1.108	0.866	0.242	0.811	1.088	0.643
25	R-45	12	1.36	1.627	1.960	1.293	0.817	0.476	0.7	0.956	0.618
26	R-45	13	1.379	1.589	1.984	1.084	0.806	0.278	0.655	0.865	0.627
27	R-46	1	1.798	2.070	2.671	1.618	1.226	0.392	1.167	1.563	0.740
28	R-46	2	1.641	1.872	2.563	1.595	1.256	0.339	1.28	1.885	0.650
29	R-46	3	1.642	1.940	2.563	1.398	1.105	0.293	1.112	1.469	0.714
30	R-46	4	1.630	1.879	2.552	1.690	1.327	0.363	1.209	1.741	0.771
31	R-46	5	1.614	1.874	2.630	1.622	1.296	0.326	1.349	1.91	0.663
32	R-46	6	1.605	1.874	2.674	1.524	1.248	0.276	1.222	1.814	0.742
33	R-46	7	1.607	1.928	2.690	1.644	1.280	0.364	1.297	1.83	0.707
34	R-46	8	1.582	1.882	2.650	1.708	1.418	0.290	1.417	2.034	0.671
35	R-47	1	1.808	2.060	2.735	1.465	1.170	0.295	1.217	1.598	0.786
36	R-47	2	1.758	2.040	2.715	1.631	1.260	0.371	1.124	1.663	0.720
37	R-47	3	1.708	2.021	2.586	1.367	1.061	0.306	1.013	1.442	0.750
38	R-47	4	1.672	1.962	2.535	1.602	1.168	0.434	1.17	1.503	0.763
39	R-47	5	1.578	1.858	2.572	1.611	1.262	0.349	1.291	1.786	0.698
40	R-48	1	1.557	1.832	3.107	2.126	1.896	0.293	2.322	3.326	0.794
41	R-48	2	1.439	1.702	3.049	2.014	1.692	0.322	2.107	2.752	0.753
42	R-48	3	1.380	1.639	2.751	1.631	1.334	0.297	1.541	2.218	0.698
43	R-48	4	1.401	1.618	2.999	1.796	1.574	0.222	1.885	2.6	0.761
44	R-48	5	1.369	1.574	2.835	2.124	1.756	0.368	1.783	2.507	0.650
45	R-48	6	1.363	1.593	2.537	1.463	1.270	0.193	1.456	1.851	0.686

Shell of *Rhiostoma* sp.2

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-52	1	1.888	2.220	2.539	1.452	1.036	0.416	0.607	1.054	0.789
2	R-52	2	2.017	2.330	2.654	1.424	0.979	0.445	0.566	0.853	0.821
3	R-52	3	1.919	2.272	2.425	1.354	0.899	0.455	0	0	0.740
4	R-52	4	1.882	2.227	2.488	1.484	0.954	0.530	0.528	0.722	0.774
5	R-52	5	1.904	2.204	2.415	1.399	0.941	0.458	0	0	0.751
6	R-52	6	1.917	2.237	2.528	1.343	0.929	0.414	0.602	0.729	0.772
7	R-52	7	1.819	2.192	2.390	1.249	0.859	0.390	0.389	0.648	0.704
8	R-52	8	1.943	2.222	2.466	1.343	0.919	0.424	0.442	0.489	0.777
9	R-52	9	1.822	2.136	2.355	1.334	0.880	0.454	0.532	0.674	0.728
10	R-52	10	2.021	2.305	2.578	1.379	0.927	0.446	0.42	0.493	0.789
11	R-52	11	2.068	2.336	2.521	1.464	0.990	0.474	0	0	0.760
12	R-52	12	1.854	2.166	2.392	1.394	0.912	0.482	0	0	0.770
13	R-52	13	1.887	2.237	2.452	1.308	0.904	0.404	0.276	0.598	0.763
14	R-52	14	1.926	2.321	2.523	1.354	0.936	0.418	0.474	0.557	0.770
15	R-52	15	1.967	2.328	2.538	1.393	0.916	0.477	0.545	0.746	0.749
16	R-52	16	1.889	2.234	2.464	1.390	0.975	0.415	0.54	0.652	0.717
17	R-52	17	1.829	2.130	2.334	1.211	0.823	0.388	0.359	0.435	0.710
18	R-52	18	1.972	2.252	2.442	1.417	0.961	0.456	0	0	0.741
19	R-52	19	1.836	2.155	2.407	1.336	0.910	0.426	0.516	0.696	0.735
20	R-52	20	1.880	2.243	2.490	1.260	0.860	0.400	0.43	0.446	0.749
21	R-52	21	1.927	2.346	2.574	1.367	0.928	0.439	0	0	0.801
22	R-52	22	1.822	2.104	2.377	1.400	0.908	0.492	0.536	0.775	0.715
23	R-52	23	1.747	2.063	2.226	1.206	0.824	0.382	0	0	0.674
24	R-52	24	1.940	2.266	2.481	1.340	0.903	0.437	0.503	0.635	0.764
25	R-52	25	1.992	2.286	2.529	1.512	0.961	0.551	0.454	0.639	0.786
26	R-52	26	1.985	2.344	2.564	1.407	0.946	0.461	0	0	0.764
27	R-52	27	1.910	2.178	2.422	1.352	0.900	0.452	0.346	0.487	0.742
28	R-52	28	1.817	2.179	2.474	1.301	0.897	0.404	0.471	0.672	0.763
29	R-52	29	1.920	2.204	2.402	1.379	0.911	0.468	0	0	0.736
30	R-52	30	1.828	2.194	2.382	1.335	0.862	0.473	0	0	0.751
31	R-52	31	1.883	2.251	2.461	1.330	0.878	0.452	0	0	0.763
32	R-52	32	1.920	2.296	2.528	1.364	0.924	0.440	0.424	0.667	0.754
33	R-52	33	1.919	2.248	2.469	1.379	0.925	0.454	0.388	0.552	0.754
34	R-52	34	1.824	2.150	2.368	1.204	0.861	0.343	0	0	0.756
35	R-52	35	2.018	2.380	2.650	1.398	0.940	0.458	0.487	0.642	0.808
36	R-52	36	1.931	2.284	2.470	1.357	0.896	0.461	0	0	0.748



Shell of *Rhiostoma* sp.2 (contonue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
37	R-52	37	1.876	2.197	2.339	1.306	0.858	0.440	0.217	0.219	0.731
38	R-52	38	0.920	2.276	2.460	1.261	0.888	0.373	0	0	0.746
39	R-52	39	1.803	2.182	2.440	1.350	0.919	0.403	0.424	0.72	0.740
40	R-52	40	1.835	2.181	2.400	1.421	0.943	0.478	0.498	0.555	0.751
41	R-52	41	1.826	2.129	2.382	1.342	0.938	0.404	0.44	0.597	0.730
42	R-52	42	1.944	2.298	2.493	1.358	0.958	0.400	0	0	0.757
43	R-52	43	1.899	2.196	2.413	1.126	0.856	0.270	0	0	0.749
44	R-52	44	1.851	2.124	2.358	1.273	0.852	0.421	0.272	0.434	0.796
45	R-52	45	1.796	2.164	2.343	1.286	0.838	0.448	0.364	0.418	0.691
46	R-52	46	1.907	2.188	2.376	1.377	0.890	0.487	0	0	0.697
47	R-52	47	1.767	2.052	2.217	1.148	0.822	0.326	0	0	0.670
48	R-52	48	1.787	2.062	2.190	1.267	0.838	0.429	0	0	0.724
49	R-52	49	1.958	2.240	2.468	1.411	0.935	0.476	0.409	0.65	0.749
50	R-52	50	1.921	2.264	2.483	1.286	0.873	0.413	0.356	0.404	0.750
51	R-52	51	1.992	2.422	2.600	1.477	1.009	0.468	0	0	0.796
52	R-52	52	1.857	2.196	2.371	1.446	0.959	0.487	0.558	0.818	0.738
53	R-52	53	1.924	2.268	2.511	1.400	0.945	0.455	0	0	0.750
54	R-52	54	1.931	2.239	2.542	1.579	1.097	0.482	0.698	1.002	0.759
55	R-52	55	1.981	2.270	2.414	1.381	0.936	0.445	0	0	0.747
56	R-52	56	1.779	2.090	2.295	1.224	0.868	0.356	0	0	0.718
57	R-52	57	1.968	2.280	2.582	1.390	0.996	0.394	0.67	1.028	0.775
58	R-52	58	1.788	2.115	2.348	1.240	0.889	0.351	0.406	0.57	0.710
59	R-52	59	1.861	2.212	2.430	1.315	0.912	0.403	0.486	0.694	0.768
60	R-52	60	1.894	2.187	2.410	1.296	0.880	0.416	0	0	0.742
61	R-52	61	1.921	2.246	2.442	1.319	0.881	0.438	0	0	0.726
62	R-52	62	1.800	2.077	2.369	1.361	0.954	0.407	0.596	0.819	0.744
63	R-52	63	1.948	2.285	2.601	1.401	1.054	0.347	0.627	0.998	0.791
64	R-52	64	2.024	2.303	2.466	1.390	0.902	0.488	0	0	0.740
65	R-52	65	1.891	2.212	2.506	1.406	0.980	0.426	0.482	0.766	0.748
66	R-52	66	1.983	2.296	2.511	1.390	0.938	0.452	0.348	0.494	0.777
67	R-52	67	1.725	2.026	2.206	1.279	0.849	0.430	0	0	0.665
68	R-52	68	1.886	2.174	2.417	1.472	0.953	0.519	0.511	0.687	0.702
69	R-52	69	1.794	2.065	2.291	1.123	0.823	0.300	0	0	0.685
70	R-52	70	1.786	2.216	2.290	1.198	0.826	0.372	0	0	0.717
71	R-52	71	1.914	2.258	2.538	1.456	0.944	0.512	0.5	0.729	0.772
72	R-52	72	1.978	2.310	2.466	1.376	0.899	0.477	0.359	0.591	0.784
73	R-52	73	2.032	2.420	2.632	1.440	0.987	0.453	0.443	0.664	0.772

Shell of *Rhiostoma* sp.2 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
74	R-52	74	2.080	2.425	2.550	1.412	0.892	0.520	0	0	0.746
75	R-52	75	1.970	2.305	2.530	1.359	0.899	0.460	0.355	0.514	0.732
76	R-52	76	1.932	2.296	2.487	1.340	0.934	0.406	0.31	0.561	0.757
77	R-52	77	1.942	2.237	2.435	1.274	0.893	0.381	0	0	0.741
78	R-52	78	1.866	2.227	2.487	1.312	0.951	0.361	0.607	0.913	0.748
79	R-52	79	1.848	2.129	2.296	1.218	0.830	0.388	0	0	0.700
80	R-52	80	1.752	2.068	2.238	1.166	0.856	0.310	0	0	0.704
81	R-52	81	1.835	2.200	2.384	1.340	0.924	0.416	0.311	0.648	0.753
82	R-52	82	1.792	2.129	2.326	1.327	0.922	0.405	0	0	0.715
83	R-52	83	1.899	2.264	2.530	1.368	0.912	0.456	0.447	0.503	0.760
84	R-52	84	1.841	2.192	2.420	1.300	0.914	0.386	0.45	0.76	0.736
85	R-52	85	1.882	2.193	2.420	1.258	0.874	0.384	0.436	0.578	0.731
86	R-52	86	2.040	2.365	2.590	1.496	0.991	0.505	0.575	0.654	0.746
87	R-52	87	1.946	2.299	2.486	1.387	0.956	0.431	0	0	0.756
88	R-52	88	1.918	2.303	2.571	1.268	0.896	0.372	0.516	0.614	0.768
89	R-52	89	1.866	2.316	2.470	1.221	0.884	0.337	0	0	0.750
90	R-52	90	1.912	2.250	2.534	1.450	0.981	0.469	0.468	0.54	0.775
91	R-52	91	1.941	2.294	2.472	1.264	0.901	0.363	0	0	0.732
92	R-52	92	1.993	2.349	2.582	1.371	0.942	0.429	0.391	0.578	0.776
93	R-52	93	1.990	2.299	2.522	1.335	0.909	0.426	0	0	0.795
94	R-52	94	1.981	2.291	2.447	1.352	0.903	0.449	0	0	0.746
95	R-52	95	1.932	2.265	2.455	1.274	0.898	0.376	0.387	0.45	0.788
96	R-52	96	1.892	2.232	2.459	1.434	0.970	0.464	0.579	0.855	0.740
97	R-52	97	1.881	2.236	2.454	1.346	0.940	0.406	0.418	0.564	0.730
98	R-52	98	1.947	2.187	2.440	1.349	0.907	0.442	0	0	0.725
99	R-52	99	1.750	2.028	2.251	1.262	0.877	0.385	0.436	0.606	0.708
100	R-52	100	1.972	2.334	2.530	1.416	0.991	0.425	0	0	0.776

Shell of *Rhiostoma* sp.3

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-53	1	2.162	2.478	2.691	1.590	1.010	0.580	0	0	0.831
2	R-53	2	1.966	2.317	2.541	1.518	0.963	0.555	0	0	0.841
3	R-53	3	2.050	2.378	2.595	1.631	1.034	0.597	0	0	0.853
4	R-53	4	2.051	2.360	2.528	1.462	0.960	0.502	0	0	0.836
5	R-53	5	1.919	2.338	2.565	1.443	0.996	0.447	0	0	0.839
6	R-53	6	2.133	2.498	2.691	1.554	0.956	0.598	0	0	0.819

Shell of *Rhiostoma* sp.3 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
7	R-53	7	2.027	0.354	2.514	1.432	0.981	0.451	0	0	0.821
8	R-53	8	1.986	2.254	2.448	1.422	0.911	0.511	0	0	0.772
9	R-53	9	1.990	2.303	2.477	1.583	0.987	0.596	0	0	0.816
10	R-53	10	2.107	2.447	2.612	1.509	1.019	0.490	0	0	0.838
11	R-53	11	2.137	2.494	2.587	1.482	0.956	0.526	0	0	0.844
12	R-53	12	1.840	2.225	2.325	1.434	0.914	0.520	0	0	0.796
13	R-53	13	2.000	2.370	2.486	1.377	0.895	0.482	0	0	0.757
14	R-53	14	1.985	2.366	2.512	1.521	0.962	0.559	0	0	0.821
15	R-53	15	2.039	2.383	2.553	1.558	0.989	0.569	0	0	0.785
16	R-53	16	1.918	2.290	2.380	1.430	0.898	0.532	0	0	0.770
17	R-53	17	1.999	2.368	2.512	1.488	0.966	0.522	0	0	0.809
18	R-53	18	1.962	2.334	2.484	1.418	0.912	0.506	0	0	0.806
19	R-53	19	2.016	2.396	2.538	1.442	0.922	0.520	0	0	0.802
20	R-53	20	2.084	2.497	2.598	1.543	1.056	0.487	0	0	0.760
21	R-53	21	2.129	2.508	2.668	1.536	0.982	0.554	0	0	0.810
22	R-53	22	2.034	2.389	2.516	1.464	0.912	0.552	0	0	0.758
23	R-53	23	2.116	2.541	2.678	1.524	0.956	0.568	0	0	0.834
24	R-53	24	1.952	2.386	2.504	1.467	0.954	0.513	0	0	0.810
25	R-53	25	2.068	2.434	2.568	1.566	1.006	0.560	0	0	0.835
26	R-53	26	1.965	2.397	2.487	1.529	0.960	0.569	0	0	0.806
27	R-53	27	2.016	2.418	2.549	1.424	0.884	0.540	0	0	0.818
28	R-53	28	2.098	2.527	2.684	1.588	1.020	0.568	0	0	0.839
29	R-53	29	1.967	2.353	2.458	1.463	0.929	0.534	0	0	0.799
30	R-53	30	1.943	2.370	2.490	1.569	1.001	0.568	0	0	0.812
31	R-53	31	2.202	2.590	2.740	1.609	1.006	0.603	0	0	0.850
32	R-53	32	2.087	2.508	2.694	1.527	1.018	0.509	0.446	0.672	0.820
33	R-53	33	2.216	2.526	2.636	1.574	0.987	0.587	0	0	0.846
34	R-53	34	2.070	2.452	2.599	1.490	0.926	0.564	0	0	0.765
35	R-53	35	2.014	2.363	2.444	1.536	0.904	0.632	0	0	0.759
36	R-53	36	1.976	2.360	2.458	1.500	0.959	0.541	0	0	0.801
37	R-53	37	2.090	2.483	2.568	1.474	0.964	0.510	0	0	0.810
38	R-53	38	2.075	2.456	2.566	1.678	1.004	0.674	0	0	0.791
39	R-53	39	1.597	2.384	2.486	1.386	0.910	0.476	0	0	0.788
40	R-53	40	2.271	2.646	2.777	1.553	1.025	0.528	0	0	0.875
41	R-53	41	2.108	2.460	2.597	1.674	1.014	0.660	0	0	0.826
42	R-53	42	2.068	2.426	2.576	1.615	1.007	0.608	0	0	0.810
43	R-53	43	2.103	2.408	2.519	1.548	0.971	0.577	0	0	0.798

Shell of *Rhiostoma* sp.3 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
44	R-53	44	1.997	2.368	2.454	1.465	0.929	0.536	0	0	0.801
45	R-53	45	1.986	2.384	2.481	1.523	0.936	0.587	0	0	0.818
46	R-53	46	1.989	2.361	2.519	1.347	0.896	0.451	0	0	0.781
47	R-53	47	2.030	2.410	2.488	1.473	0.983	0.490	0	0	0.793
48	R-53	48	2.163	2.578	2.761	1.516	0.943	0.573	0	0	0.839
49	R-53	49	2.244	2.620	2.739	1.598	1.010	0.588	0	0	0.846
50	R-53	50	2.215	2.563	2.678	1.535	0.996	0.539	0	0	0.808
51	R-53	51	1.936	2.244	2.382	1.415	0.884	0.531	0	0	0.760
52	R-53	52	2.054	2.444	2.603	1.540	0.968	0.572	0	0	0.788
53	R-53	53	1.972	2.318	2.456	1.484	0.946	0.538	0	0	0.768
54	R-53	54	2.034	2.431	2.521	1.560	1.011	0.549	0	0	0.830
55	R-53	55	2.048	2.384	2.492	1.372	0.890	0.482	0	0	0.766
56	R-53	56	2.059	2.405	2.525	1.381	0.907	0.474	0	0	0.796
57	R-53	57	1.996	2.339	2.432	1.404	0.908	0.496	0	0	0.810
58	R-53	58	2.082	2.522	2.649	1.488	0.968	0.520	0	0	0.869
59	R-53	59	2.195	2.556	2.654	1.653	1.051	0.602	0	0	0.818
60	R-53	60	1.914	2.270	2.439	1.507	0.960	0.547	0	0	0.822
61	R-53	61	2.084	2.512	2.596	1.543	1.025	0.518	0	0	0.826
62	R-53	62	2.094	2.378	2.562	1.581	1.058	0.523	0	0	0.774
63	R-53	63	2.134	2.434	2.574	1.496	0.976	0.522	0	0	0.788
64	R-53	64	2.038	2.424	2.551	1.360	0.930	0.430	0.328	0.421	0.788
65	R-53	65	1.964	2.332	2.486	1.555	0.978	0.577	0	0	0.796
66	R-53	66	2.060	2.393	2.523	1.402	0.941	0.461	0	0	0.792
67	R-53	67	2.068	2.362	2.522	1.478	0.953	0.525	0	0	0.802
68	R-53	68	2.074	2.452	2.611	1.542	0.983	0.559	0	0	0.783
69	R-53	69	1.950	2.351	2.469	1.504	0.944	0.560	0	0	0.800
70	R-53	70	2.046	2.336	2.530	1.514	0.974	0.540	0	0	0.783
71	R-53	71	2.013	2.323	2.520	1.467	0.948	0.519	0	0	0.814
72	R-53	72	1.907	2.262	2.459	1.377	0.885	0.492	0	0	0.742
73	R-53	73	1.956	2.354	2.470	1.505	0.936	0.569	0	0	0.800
74	R-53	74	2.170	2.424	2.640	1.501	0.950	0.551	0	0	0.838
75	R-53	75	1.938	2.267	2.492	1.413	1.004	0.409	0	0	0.820
76	R-53	76	2.150	2.450	2.649	1.492	0.939	0.553	0	0	0.827
77	R-53	77	2.148	2.506	2.641	1.547	1.024	0.523	0	0	0.849
78	R-53	78	2.084	2.338	2.546	1.352	0.914	0.438	0	0	0.779
79	R-53	79	2.046	2.280	2.497	1.470	0.963	0.507	0	0	0.758
80	R-53	80	1.994	2.235	2.401	1.474	0.912	0.562	0	0	0.808

Shell of *Rhiostoma* sp.3 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
81	R-53	81	1.973	2.350	2.514	1.463	0.967	0.496	0	0	0.832
82	R-53	82	2.010	2.371	2.466	1.543	0.928	0.615	0	0	0.811
83	R-53	83	2.150	2.416	2.604	1.403	0.917	0.486	0	0	0.804
84	R-53	84	2.079	2.382	2.489	1.406	0.932	0.474	0	0	0.816
85	R-53	85	2.075	2.310	2.466	1.562	0.917	0.645	0	0	0.764
86	R-53	86	2.187	2.489	2.604	1.548	0.949	0.599	0	0	0.822
87	R-53	87	2.036	2.379	2.560	1.397	0.926	0.471	0	0	0.821
88	R-53	88	2.026	2.293	2.427	1.481	0.927	0.554	0	0	0.782
89	R-53	89	2.002	2.277	2.502	1.348	0.908	0.440	0	0	0.796
90	R-53	90	2.014	2.324	2.507	1.445	0.948	0.497	0	0	0.800
91	R-53	91	2.161	2.522	2.665	1.362	0.967	0.395	0	0	0.826
92	R-53	92	1.921	2.242	2.453	1.439	0.934	0.505	0	0	0.770
93	R-53	93	2.200	2.497	2.661	1.618	0.947	0.671	0	0	0.834
94	R-53	94	2.089	2.348	2.547	1.472	0.973	0.499	0	0	0.814
95	R-53	95	1.950	2.198	2.366	1.394	0.902	0.492	0	0	0.774
96	R-53	96	2.056	2.371	2.544	1.515	0.974	0.541	0	0	0.820
97	R-53	97	1.967	2.309	2.416	1.392	0.919	0.473	0	0	0.847
98	R-53	98	2.156	2.426	2.692	1.570	1.004	0.566	0	0	0.861
99	R-53	99	1.988	2.332	2.487	1.379	0.910	0.469	0	0	0.811
100	R-53	100	1.981	2.240	2.434	1.459	0.915	0.544	0	0	0.813

Shell of *Rhiostoma* sp.4

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-54	1	1.543	1.764	1.992	1.332	0.854	0.478	0.465	0.704	0.548
2	R-54	2	1.623	1.872	2.132	1.330	0.872	0.458	0.528	0.74	0.589
3	R-54	3	1.612	1.859	2.036	1.267	0.806	0.461	0.275	0.482	0.604
4	R-54	4	1.542	1.859	2.073	1.282	0.844	0.438	0.535	0.764	0.572
5	R-54	5	1.679	2.008	2.201	1.133	0.755	0.378	0.445	0.622	0.590
6	R-54	6	1.550	1.854	2.091	1.258	0.848	0.410	0.432	0.594	0.553
7	R-54	7	1.616	1.911	2.069	1.162	0.737	0.425	0.216	0.388	0.575
8	R-54	8	1.512	1.742	1.955	1.224	0.802	0.422	0.375	0.557	0.572
9	R-54	9	1.632	1.944	2.217	1.161	0.822	0.339	0.543	0.594	0.592
10	R-54	10	1.595	1.836	2.016	1.200	0.775	0.425	0.268	0.439	0.594
11	R-54	11	1.596	1.863	2.046	1.177	0.771	0.406	0.288	0.361	0.566
12	R-54	12	1.629	1.836	1.980	1.220	0.737	0.483	0.141	0.243	0.590
13	R-54	13	1.470	1.785	2.004	1.171	0.808	0.363	0.404	0.564	0.537

Shell of *Rhiostoma* sp.4 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
14	R-54	14	1.518	1.820	1.967	1.244	0.802	0.442	0	0	0.568
15	R-54	15	1.464	1.733	1.937	1.080	0.745	0.335	0.331	0.502	0.530
16	R-54	16	1.420	1.697	1.848	1.199	0.741	0.458	0.307	0.43	0.522
17	R-54	17	1.504	1.788	1.968	1.076	0.698	0.378	0	0	0.537
18	R-54	18	1.461	1.686	1.842	1.015	0.668	0.347	0.244	0.289	0.548
19	R-54	19	1.502	1.760	1.881	1.140	0.714	0.426	0	0	0.531
20	R-54	20	1.266	1.531	1.643	0.898	0.594	0.304	0	0	0.496
21	R-54	21	1.456	1.712	1.860	1.107	0.740	0.367	0.375	0.436	0.529
22	R-54	22	1.413	1.743	1.888	1.002	0.722	0.280	0.384	0.46	0.530
23	R-54	23	1.459	1.782	1.899	1.023	0.688	0.335	0	0	0.547
24	R-54	24	1.546	1.824	1.962	1.168	0.735	0.433	0	0	0.578
25	R-54	25	1.596	1.724	1.953	1.188	0.774	0.414	0.413	0.536	0.536
26	R-54	26	1.549	1.814	1.999	1.312	0.808	0.504	0.327	0.409	0.574
27	R-54	27	1.414	1.693	1.879	1.090	0.692	0.398	0	0	0.544
28	R-54	28	1.481	1.789	1.986	1.164	0.772	0.392	0	0	0.555
29	R-54	29	1.477	1.770	1.940	1.104	0.735	0.369	0.336	0.43	0.552
30	R-54	30	1.622	1.824	2.030	1.227	0.778	0.449	0.323	0.418	0.566
31	R-54	31	1.362	1.608	1.790	1.081	0.734	0.347	0.271	0.485	0.498
32	R-54	32	1.530	1.824	2.015	1.152	0.723	0.429	0.301	0.376	0.547
33	R-54	33	1.504	1.768	1.906	1.169	0.684	0.485	0	0	0.540
34	R-54	34	1.318	1.533	1.659	0.957	0.616	0.341	0.101	0.162	0.479
35	R-54	35	1.432	1.652	2.019	1.078	0.790	0.288	0.505	0.633	0.584
36	R-54	36	1.454	1.750	1.934	1.070	0.742	0.328	0.309	0.41	0.559
37	R-54	37	1.592	1.875	2.056	1.131	0.749	0.382	0.315	0.377	0.564
38	R-54	38	1.436	1.708	1.884	0.992	0.690	0.302	0	0	0.535
39	R-54	39	1.419	1.699	1.864	1.141	0.751	0.390	0.375	0.513	0.554
40	R-54	40	1.435	1.656	1.878	1.099	0.734	0.365	0.34	0.472	0.564
41	R-54	41	1.525	1.689	1.880	1.032	0.699	0.333	0	0	0.512
42	R-54	42	1.391	1.636	1.741	1.053	0.662	0.391	0	0	0.790
43	R-54	43	1.488	1.654	1.775	1.058	0.685	0.373	0	0	0.516
44	R-55	1	1.516	1.836	2.079	1.193	0.839	0.354	0.455	0.632	0.596
45	R-55	2	1.580	1.826	1.983	1.214	0.765	0.449	0.288	0.564	0.577
46	R-55	3	1.598	1.880	2.024	1.192	0.780	0.412	0.216	0.348	0.595
47	R-55	4	1.406	1.680	1.856	0.977	0.688	0.289	0.38	0.434	0.542
48	R-55	5	1.448	1.703	1.832	1.184	0.732	0.452	0.228	0.35	0.531
49	R-55	6	1.631	1.896	2.124	1.277	0.838	0.439	0.405	0.643	0.589
50	R-55	7	1.618	1.925	2.161	1.310	0.903	0.407	0.571	0.818	0.630

Shell of *Rhiostoma* sp.4 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
51	R-55	8	1.587	1.844	1.930	1.062	0.733	0.329	0	0	0.557
52	R-55	9	1.564	1.839	1.998	1.216	0.800	0.416	0	0	0.567
53	R-55	10	1.613	1.902	2.072	1.246	0.761	0.485	0.296	0.395	0.598
54	R-55	11	1.588	1.882	2.092	1.249	0.834	0.415	0.462	0.725	0.577
55	R-55	12	1.636	1.932	2.198	1.224	0.881	0.343	0.624	0.937	0.695
56	R-55	13	1.626	1.893	2.156	1.372	0.867	0.505	0.655	0.886	0.602
57	R-55	14	1.623	1.898	2.109	1.277	0.824	0.453	0.391	0.557	0.577
58	R-55	15	1.620	1.903	2.180	1.240	0.894	0.346	0.629	0.778	0.596
59	R-55	16	1.658	1.934	2.092	1.187	0.763	0.424	0.388	0.423	0.590
60	R-55	17	1.591	1.871	2.180	1.311	0.858	0.453	0.59	0.863	0.608
61	R-55	18	1.510	1.848	2.036	1.138	0.792	0.346	0.378	0.458	0.622
62	R-55	19	1.548	1.842	2.086	1.163	0.830	0.333	0.457	-	0.608
63	R-55	20	1.541	1.706	1.950	1.261	0.806	0.405	0.3	0.434	0.563
64	R-55	21	1.515	1.790	2.056	1.204	0.863	0.341	0.508	0.701	0.531
65	R-55	22	1.567	1.850	2.043	1.159	0.785	0.374	0.398	0.606	0.584
66	R-55	23	1.414	1.709	1.845	0.999	0.700	0.299	0.183	0.256	0.535
67	R-55	24	1.498	1.778	1.928	1.040	0.701	0.339	0.34	0.432	0.564
68	R-55	25	1.490	1.768	1.944	1.169	0.775	0.394	0.342	0.559	0.547
69	R-55	26	1.445	1.678	1.885	1.356	0.856	0.500	0.581	0.83	0.545
70	R-55	27	1.534	1.793	1.938	1.194	0.728	0.466	0.292	0.472	0.537
71	R-55	28	1.346	1.605	1.773	0.944	0.667	0.277	0.273	0.275	0.457
72	R-55	29	1.477	1.776	1.917	1.058	0.730	0.328	0.199	0.292	0.557
73	R-55	30	1.518	1.798	1.928	1.073	0.738	0.335	0	0	0.602
74	R-55	31	1.416	1.694	1.800	1.086	0.703	0.383	0.177	0.216	0.505
75	R-55	32	1.393	1.640	1.839	1.100	0.747	0.353	0.399	0.437	0.528
76	R-55	33	1.367	1.636	1.821	0.981	0.679	0.302	0.31	0.512	0.506
77	R-55	34	1.416	1.637	1.806	1.080	0.715	0.365	0.198	0.302	0.532
78	R-55	35	1.397	1.697	1.787	0.978	0.693	0.285	0.134	0.215	0.506
79	R-56	1	1.750	2.101	2.363	1.185	0.869	0.316	0.352	0.905	0.680
80	R-56	2	1.633	1.971	2.177	1.206	0.787	0.419	0.269	0.529	0.619
81	R-56	3	1.666	1.980	2.200	1.135	0.849	0.286	0.408	0.72	0.637
82	R-56	4	1.650	1.927	2.173	1.305	0.891	0.414	0.481	0.761	0.647
83	R-56	5	1.655	1.864	2.126	1.271	0.850	0.721	0.464	0.626	0.644
84	R-56	6	1.638	1.924	2.122	1.319	0.922	0.397	0.448	0.702	0.638
85	R-56	7	1.576	1.874	2.104	1.239	0.866	0.373	0.474	0.635	0.635
86	R-56	8	1.593	1.881	2.046	1.112	0.752	0.360	0.245	0.385	0.633
87	R-57	1	1.596	1.851	2.116	1.274	0.856	0.418	0.497	0.828	0.614

Shell of *Rhiostoma* sp.4 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
88	R-57	2	1.549	1.864	2.062	1.193	0.787	0.406	0.488	0.582	0.598
89	R-57	3	1.588	1.842	2.050	1.358	0.880	0.478	0.551	0.586	0.581
90	R-57	4	1.620	1.910	2.132	1.228	0.826	0.402	0.452	0.721	0.606
91	R-57	5	1.591	1.852	2.024	1.152	0.736	0.416	0.217	0.326	0.572
92	R-57	6	1.540	1.785	2.042	1.212	0.823	0.389	0.488	0.731	0.574
93	R-57	7	1.459	1.740	1.961	1.174	0.792	0.382	0.492	0.57	0.587
94	R-57	8	1.571	1.903	2.145	1.227	0.836	0.391	0.587	0.814	0.576
95	R-57	9	1.641	1.907	2.090	1.359	0.868	0.491	0.443	0.506	0.580
96	R-57	10	1.569	1.864	2.083	1.231	0.839	0.392	0.406	0.646	0.591
97	R-57	11	1.398	1.668	1.911	1.129	0.778	0.351	0.435	0.702	0.546
98	R-57	12	1.542	1.797	1.978	1.294	0.782	0.512	0.371	0.4	0.567
99	R-57	13	1.540	1.823	2.034	1.216	0.790	0.426	0.438	0.694	0.565
100	R-57	14	1.467	1.758	1.966	1.139	0.775	0.364	0.381	0.604	0.544
101	R-57	15	1.571	1.760	1.948	1.229	0.750	0.479	0.366	0.424	0.554
102	R-57	16	1.464	1.752	1.929	1.110	0.747	0.363	0.335	0.495	0.575
103	R-57	17	1.380	1.620	1.855	1.204	0.840	0.364	0.5	0.79	0.567
104	R-57	18	1.453	1.747	1.932	1.106	0.752	0.354	0.395	0.543	0.554
105	R-57	19	1.506	1.794	2.078	1.241	0.873	0.368	0.687	0.932	0.575
106	R-57	20	1.451	1.669	1.949	1.246	0.807	0.439	0.498	0.686	0.540
107	R-57	21	1.400	1.664	1.871	1.054	0.718	0.336	0.29	0.562	0.539
108	R-57	22	1.467	1.709	1.853	1.107	0.737	0.370	0.359	0.392	0.530
109	R-57	23	1.395	1.650	1.841	1.150	0.750	0.400	0.371	0.722	0.522
110	R-57	24	1.426	1.725	1.848	1.042	0.700	0.342	0	0	0.546
111	R-57	25	1.377	1.597	1.769	1.030	0.671	0.359	0.23	0.319	0.521
112	R-58	1	1.749	1.982	2.136	1.217	0.792	0.425	0.232	0.304	0.621
113	R-58	2	1.696	2.001	2.102	1.176	0.755	0.421	0.198	0.2	0.620
114	R-58	3	1.636	1.950	2.039	1.169	0.759	0.410	0.302	0.452	0.601
115	R-58	4	1.634	1.920	2.060	1.156	0.772	0.384	0.282	0.335	0.618
116	R-58	5	1.575	1.857	1.966	1.100	0.768	0.332	0.162	0.164	0.594

Shell of *Rhiostoma* sp.5

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-61	1	1.642	1.932	3.964	2.175	2.000	0.175	2.734	2.816	0.822
2	R-61	2	1.674	1.939	3.464	2.247	1.918	0.329	2.185	2.734	0.840
3	R-61	3	1.560	1.802	3.419	2.346	2.014	0.332	2.277	2.368	0.809
4	R-61	4	1.518	1.750	3.384	2.635	2.226	0.409	2.345	2.464	0.752



Shell of *Rhiostoma* sp.5 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
5	R-61	5	1.592	1.894	3.316	2.382	2.092	0.290	2.286	2.63	0.807
6	R-61	6	1.618	1.848	3.239	2.490	2.074	0.416	2.08	2.566	0.758
7	R-61	7	1.640	1.910	3.314	2.290	1.913	0.377	2.086	2.698	0.736
8	R-61	8	1.550	1.791	3.304	2.015	1.738	0.277	2.121	2.474	0.746
9	R-61	9	1.388	1.678	3.403	2.713	2.474	0.239	2.504	3.19	0.771
10	R-61	10	1.536	1.783	3.352	2.080	1.798	0.282	2.167	2.36	0.738
11	R-61	11	1.696	1.986	3.071	1.772	1.468	0.304	1.582	1.805	0.768
12	R-61	12	1.642	1.986	3.080	1.922	1.696	0.226	1.726	2.143	0.750
13	R-61	13	1.658	1.935	2.964	1.730	1.426	0.304	1.428	1.734	0.753
14	R-61	14	1.574	1.806	2.961	1.630	1.361	0.269	1.424	1.806	0.736
15	R-61	15	1.628	1.866	2.932	1.577	1.371	0.206	1.421	1.69	0.725
16	R-61	16	1.626	1.872	2.953	1.374	1.141	0.233	1.492	2.001	0.728
17	R-61	17	1.590	1.818	2.940	1.680	1.376	0.304	1.502	1.751	0.746
18	R-61	18	1.596	1.846	2.970	1.506	1.195	0.311	1.304	1.526	0.748
19	R-61	19	1.597	1.800	3.047	1.672	1.358	0.314	1.668	1.933	0.717
20	R-61	20	1.504	1.745	2.963	1.564	1.324	0.240	1.528	1.967	0.720
21	R-61	21	1.542	1.800	2.876	1.564	1.302	0.262	1.472	2.086	0.760
22	R-61	22	1.556	1.825	2.777	1.948	1.601	0.347	1.546	1.858	0.700
23	R-61	23	1.584	1.856	2.674	1.536	1.284	0.252	1.179	1.66	0.718
24	R-61	24	1.518	1.761	2.789	1.696	1.365	0.327	1.487	1.901	0.713
25	R-61	25	1.549	1.750	2.759	1.542	1.218	0.324	1.329	1.69	0.744
26	R-61	26	1.567	1.782	2.758	1.698	1.330	0.368	1.354	1.642	0.710
27	R-61	27	1.539	1.767	2.603	1.430	1.146	0.284	1.15	1.431	0.704
28	R-61	28	1.540	1.806	2.476	1.380	1.082	0.298	1.033	1.373	0.717
29	R-62	1	1.614	1.871	3.438	2.382	1.977	0.405	2.204	2.323	0.791
30	R-62	2	1.650	1.900	3.489	1.940	1.663	0.277	2.076	2.276	0.815
31	R-62	3	1.586	1.851	3.341	1.839	1.557	0.282	1.942	2.192	0.778
32	R-62	4	1.530	1.783	3.040	1.980	1.628	0.352	1.729	2.356	0.728
33	R-62	5	1.537	1.784	2.926	1.575	1.300	0.275	1.472	1.997	0.728

Shell of *Rhiostoma* sp.6

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-63	1	1.954	2.247	3.286	2.110	1.641	0.469	1.497	2.206	0.846
2	R-63	2	1.582	1.857	2.684	1.868	1.486	0.400	1.687	1.824	0.678
3	R-63	3	1.591	1.872	2.740	1.913	1.507	0.406	1.594	2.31	0.669
4	R-63	4	1.487	1.712	2.311	1.719	1.342	0.377	1.237	1.551	0.640

Shell of *Rhiostoma* sp.6 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
5	R-63	5	1.547	1.795	2.394	1.486	1.098	0.388	0.936	1.475	0.599
6	R-63	6	1.552	1.827	2.443	1.446	1.050	0.396	0.993	1.414	0.673
7	R-64	1	1.428	1.654	2.422	1.646	1.362	0.284	1.270	1.841	0.653
8	R-64	2	1.532	1.769	2.456	1.444	1.151	0.293	1.090	1.502	0.681
9	R-64	3	1.668	1.952	2.832	1.752	1.406	0.346	1.376	2.047	0.696
10	R-64	4	1.608	1.858	2.756	1.857	1.500	0.357	1.576	2.005	0.668
11	R-64	5	1.543	1.805	2.492	1.699	1.278	0.421	1.453	1.624	0.647
12	R-64	6	1.643	1.934	2.544	1.484	1.059	0.425	1.019	1.499	0.672
13	R-64	7	1.546	1.871	2.467	1.456	1.115	0.341	1.063	1.641	0.699
14	R-64	8	1.599	1.723	2.304	1.262	0.958	0.304	1.006	1.201	0.630
15	R-64	9	1.614	1.853	2.785	1.762	1.454	0.308	1.579	2.310	0.728
16	R-64	10	1.651	1.964	2.834	1.954	1.647	0.307	1.672	2.195	0.708
17	R-64	11	1.589	1.822	2.643	1.721	1.382	0.339	1.344	1.994	0.653
18	R-64	12	1.496	1.704	2.442	1.506	1.179	0.327	1.082	1.449	0.634
19	R-64	13	1.484	1.741	2.314	1.433	1.086	0.347	0.978	1.231	0.655
20	R-64	14	1.509	1.750	2.316	1.497	1.086	0.411	1.014	1.411	0.641
21	R-64	15	1.654	1.905	2.802	1.943	1.604	0.339	1.490	1.890	0.709
22	R-64	16	1.597	1.843	2.898	1.770	1.516	0.254	1.506	1.957	0.709
23	R-64	17	1.620	1.804	2.643	1.786	1.394	0.392	1.477	1.892	0.662
24	R-64	18	1.609	1.928	2.478	1.366	1.050	0.316	0.820	1.323	0.619
25	R-64	19	1.573	1.853	2.376	1.386	1.039	0.347	0.892	1.293	0.662
26	R-64	20	1.683	1.948	2.596	1.671	1.331	0.340	1.324	1.812	0.672
27	R-64	21	1.494	1.708	2.217	1.434	1.034	0.400	0.830	1.061	0.594
28	R-64	22	1.641	1.896	2.723	2.064	1.695	0.369	1.701	2.516	0.695
29	R-64	23	1.492	1.709	2.362	1.421	1.100	0.321	1.130	1.520	0.660
30	R-64	24	1.614	1.819	2.652	1.472	1.150	0.322	1.325	1.823	0.666

Shell of *Rhiostoma* sp.7

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-65	1	1.848	2.158	2.430	1.399	0.940	0.459	0.493	0.76	0.719
2	R-65	2	1.860	2.202	2.413	1.326	0.884	0.442	0.408	0.525	0.698
3	R-65	3	1.818	2.157	2.368	1.248	0.848	0.400	0.384	0.515	0.682
4	R-65	4	1.710	2.046	2.288	1.244	0.866	0.378	0.369	0.51	0.678
5	R-65	5	1.834	2.169	2.382	1.258	0.814	0.444	0	0	0.661
6	R-65	6	1.846	2.176	2.476	1.230	0.886	0.344	0.493	0.753	0.706
7	R-65	7	1.836	2.130	2.267	1.207	0.812	0.395	0	0	0.686

Shell of *Rhiostoma* sp.7 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
8	R-65	8	1.738	2.053	2.304	1.462	0.959	0.503	0.474	0.796	0.706
9	R-65	9	1.826	2.130	2.330	1.258	0.850	0.408	0.339	0.494	0.708
10	R-65	10	1.724	2.024	2.169	1.230	0.823	0.407	0.146	0.284	0.688
11	R-65	11	1.732	2.094	2.374	1.310	0.890	0.420	0.462	0.712	0.704
12	R-65	12	1.706	2.056	2.234	1.156	0.851	0.305	0.153	0.47	0.686
13	R-65	13	1.717	2.032	2.250	1.108	0.803	0.305	0.306	0.386	0.667
14	R-65	14	1.640	1.926	2.169	1.234	0.846	0.388	0.432	0.681	0.679
15	R-65	15	1.693	2.013	2.222	1.286	0.856	0.430	0.244	0.482	0.696
16	R-65	16	1.692	1.974	2.141	1.158	0.790	0.368	0	0	0.652
17	R-65	17	1.729	1.981	2.323	1.307	0.812	0.495	0.318	0.64	0.677
18	R-65	18	1.625	2.009	2.172	1.199	0.833	0.366	0.157	0.196	0.646
19	R-65	19	1.685	1.970	2.128	1.138	0.763	0.375	0.151	0.298	0.639
20	R-65	20	1.580	1.882	2.020	1.073	0.804	0.269	0.058	0.276	0.625
21	R-65	21	1.568	1.840	2.030	1.196	0.824	0.372	0.378	0.438	0.627
22	R-65	22	1.539	1.850	2.014	1.075	0.782	0.293	0	0	0.606
23	R-65	23	1.529	1.825	2.028	1.188	0.801	0.387	0.4	0.449	0.672
24	R-65	24	1.534	1.828	2.054	1.114	0.801	0.313	0.434	0.484	0.640
25	R-65	25	1.588	1.884	2.059	1.162	0.832	0.330	0.306	0.464	0.642

Shell of *Rhiostoma* sp.8

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-66	1	2.024	2.364	2.600	1.576	1.111	0.465	0.501	1.107	0.776
2	R-66	2	1.984	2.272	2.573	1.490	1.044	0.446	0.721	1.051	0.794
3	R-66	3	1.931	2.240	2.524	1.370	0.958	0.412	0.501	0.733	-
4	R-66	4	1.978	2.242	2.439	1.217	0.884	0.333	0.319	0.394	0.749
5	R-66	5	1.977	2.256	2.396	1.536	0.996	0.540	0.492	0.738	0.776
6	R-66	6	2.027	2.375	2.544	1.433	0.914	0.519	0	0	0.742
7	R-66	7	2.110	2.468	2.648	1.340	0.888	0.452	0	0	0.759
8	R-66	8	2.041	2.352	2.621	1.644	1.124	0.520	0.620	1.024	0.805
9	R-66	9	1.958	2.286	2.487	1.416	0.954	0.462	0.427	0.704	0.766
10	R-66	10	2.090	2.433	2.699	1.432	0.901	0.531	0.564	0.864	-
11	R-66	11	2.080	2.343	2.581	1.380	0.911	0.469	0.474	0.606	0.793
12	R-66	12	1.970	2.303	2.574	1.406	0.958	0.448	0.519	0.594	0.772
13	R-66	13	2.048	2.318	2.485	1.423	0.930	0.493	0.222	0.420	0.732
14	R-66	14	2.080	2.392	2.518	-	0.900	-	0	0	0.779
15	R-66	15	1.934	2.227	2.473	1.396	0.891	0.405	0.317	0.560	0.762

Shell of *Rhiostoma* sp.8 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
16	R-66	16	1.928	2.243	2.466	1.385	0.916	0.469	0.350	0.560	0.693
17	R-66	17	2.011	2.397	2.706	1.336	0.985	0.351	0.566	0.924	0.813
18	R-66	18	2.046	2.428	2.742	1.434	1.056	0.378	0.676	0.862	0.830
19	R-66	19	1.982	2.336	2.536	1.439	0.960	0.479	0.462	0.701	0.749
20	R-66	20	1.896	2.186	2.362	1.273	0.888	0.385	0.379	0.650	0.754
21	R-66	21	2.030	2.294	2.458	1.366	0.892	0.474	0	0	0.723
22	R-67	1	2.064	2.382	2.636	1.407	0.986	0.421	0.452	0.644	0.802
23	R-67	2	1.840	2.193	2.428	1.292	0.944	0.348	0.486	0.739	-
24	R-67	3	2.014	2.382	2.591	1.389	0.859	0.530	0	0	0.753
25	R-67	4	1.869	2.221	2.358	1.234	0.806	0.428	0	0	0.737
26	R-67	5	1.896	2.196	2.434	1.554	1.058	0.496	0.714	1.062	0.746
27	R-67	6	1.873	2.197	2.466	1.288	0.910	0.378	0.525	0.813	0.773
28	R-67	7	1.944	2.172	2.308	1.298	0.829	0.469	0	0	0.731
29	R-67	8	1.900	2.158	2.377	1.296	0.870	0.426	0.372	0.546	0.724
30	R-67	9	1.832	2.046	2.280	1.204	0.818	0.386	0.292	0.432	0.696
31	R-67	10	1.782	2.056	2.282	1.360	0.900	0.460	0.438	0.710	0.704
32	R-67	11	1.797	2.117	2.316	1.164	0.883	0.281	0.433	0.700	0.724
33	R-67	12	1.754	2.080	2.368	1.218	0.929	0.289	0.499	0.646	0.698
34	R-67	13	1.832	2.044	2.206	1.254	0.821	0.433	0	0	0.694
35	R-67	14	1.685	2.002	2.198	1.235	0.831	0.404	0.430	0.643	0.670
36	R-67	15	1.661	1.964	2.279	1.278	0.946	0.332	0.682	0.622	0.666
37	R-67	16	1.719	2.037	2.230	1.257	0.898	0.359	0.527	0.665	0.658
38	R-67	17	1.770	2.032	2.262	1.294	0.856	0.438	0.406	0.645	0.681
39	R-67	18	1.773	2.090	2.349	1.254	0.880	0.374	0.504	1.046	0.699
40	R-67	19	1.831	2.133	2.326	1.215	0.864	0.351	0	0	0.688
41	R-67	20	1.809	2.190	2.239	1.111	0.820	0.291	0	0	0.695

Shell of *Rhiostoma* sp.9

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
1	R-68	1	1.646	1.899	1.965	1.815	1.445	0.370	1.711	2.669	0.807
2	R-68	2	1.667	1.958	2.776	1.654	1.296	0.358	1.317	1.825	0.737
3	R-68	3	1.535	1.768	2.602	1.676	1.342	0.334	1.411	1.745	0.732
4	R-68	4	1.595	1.853	2.805	1.992	1.654	0.388	1.669	2.374	0.742
5	R-68	5	1.606	1.918	2.677	1.432	1.151	0.281	1.127	1.646	0.727
6	R-68	6	1.681	1.990	2.753	1.759	1.424	0.335	1.33	1.967	0.804
7	R-68	7	1.576	1.921	2.659	1.474	1.217	0.257	1.242	1.69	0.716

Shell of *Rhiostoma* sp.9 (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	IA	OA	AP
8	R-68	8	1.508	1.758	2.644	1.649	1.354	0.295	1.332	1.902	0.712
9	R-68	9	1.582	1.912	2.810	1.606	1.385	0.221	1.517	2.194	0.773
10	R-68	10	1.592	1.894	2.517	1.428	1.098	0.330	1.09	1.481	0.680
11	R-68	11	1.602	1.940	2.607	1.420	1.176	0.244	1.018	1.424	0.722
12	R-68	12	1.575	1.872	2.532	1.562	1.202	0.360	1.054	1.508	0.728
13	R-68	13	1.600	1.880	2.677	1.500	1.149	0.351	1.084	1.786	0.755
14	R-68	14	1.474	1.736	2.432	1.372	1.078	0.294	0.988	1.368	0.662
15	R-69	1	1.715	2.059	2.907	1.701	1.403	0.298	1.416	2.32	0.861
16	R-69	2	1.747	2.022	2.9	1.804	1.43	0.374	1.346	2.057	0.807
17	R-69	3	1.895	2.204	2.795	1.419	1.091	0.328	0.719	1.236	0.837
18	R-69	4	1.619	1.902	2.807	1.864	1.555	0.309	1.574	2.637	0.776
19	R-69	5	1.883	2.17	2.772	1.683	1.216	0.467	1.032	1.559	0.833
20	R-69	6	1.945	2.203	2.855	1.764	1.226	0.538	0.83	1.394	0.828
21	R-69	7	1.62	1.89	2.594	1.428	1.127	0.301	0.86	1.52	0.748
22	R-69	8	1.505	1.735	2.523	1.567	1.202	0.365	1.106	1.732	0.705
23	R-69	9	1.659	1.87	2.429	1.36	1.03	0.33	0.729	1.418	0.698
24	R-69	10	1.452	1.665	2.186	1.304	0.993	0.311	0.606	1.166	0.634
25	R-70	1	1.777	2.097	2.97	1.868	1.518	0.35	1.424	2.257	0.831
26	R-70	2	1.852	2.249	3.13	1.687	1.349	0.338	1.263	2.284	0.85
27	R-70	3	1.752	2.091	2.829	1.691	1.323	0.368	1.196	2.176	0.782
28	R-70	4	1.724	2.050	2.9	1.916	1.48	0.436	1.372	2.37	0.838
29	R-70	5	1.855	2.141	2.948	1.74	1.337	0.403	1.036	1.951	0.896
30	R-70	6	1.818	2.11	3.013	1.815	1.426	0.389	1.311	2.228	0.826
31	R-70	7	1.657	1.98	2.851	1.751	1.419	0.332	1.236	1.922	0.83
32	R-70	8	1.88	2.149	2.769	1.569	1.196	0.373	0.739	1.382	0.802
33	R-70	9	1.724	1.998	2.831	1.913	1.472	0.441	1.249	2.19	0.802
34	R-70	10	1.657	1.939	2.507	1.511	1.089	0.422	0.746	1.512	0.77
35	R-70	11	1.566	1.893	2.418	1.566	1.246	0.32	0.973	1.747	0.774
36	R-70	12	1.748	1.971	2.426	1.384	0.986	0.398	0.633	0.924	0.737

Shell of *Rhiostoma jousseamei*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	AP
1	ZRC 1975.3.5.163-175	-	0.981	1.158	1.322	0.556	0.466	0.090	0.430
2	ZRC 1975.3.5.163-175	-	0.835	1.024	1.145	0.509	0.406	0.103	0.367
3	ZRC 1975.3.5.163-175	-	0.868	1.030	1.155	0.524	0.418	0.106	0.358
4	ZRC 1975.3.5.163-175	-	0.925	1.092	1.336	0.607	0.488	0.119	0.406

Shell of *Rhiostoma jousseamei* (continue)

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	AP
5	ZRC 1975.3.5.163-175	-	0.928	1.103	-	-	-	-	-
6	ZRC 1975.3.5.163-175	-	0.956	1.112	1.300	0.648	0.497	0.151	0.444
7	ZRC 1975.3.5.163-175	-	0.888	1.046	1.187	0.632	0.468	0.164	0.366
8	ZRC 1975.3.5.163-175	-	0.847	1.014	1.179	0.656	0.464	0.192	0.367
9	ZRC 1975.3.5.163-175	-	0.770	0.950	1.080	0.598	0.429	0.169	0.339
10	ZRC 1975.3.5.163-175	-	0.779	0.924	1.052	0.534	0.381	0.153	0.346
11	ZRC 1975.3.5.163-175	-	0.759	0.882	0.973	0.537	0.358	0.179	0.314
12	ZRC 1975.3.5.163-175	-	0.816	0.975	1.014	0.531	0.363	0.168	0.328

Shell of *Rhiostoma macalpine-woodsii*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	AP
1	ZRC 1975.3.5.176-187	-	0.790	0.952	1.064	0.546	0.400	0.146	0.356
2	ZRC 1975.3.5.176-187	-	0.832	1.006	1.170	0.543	0.424	0.119	0.372
3	ZRC 1975.3.5.176-187	-	0.957	1.152	-	-	-	-	-
4	ZRC 1975.3.5.176-187	-	0.974	1.142	-	-	-	-	-
5	ZRC 1975.3.5.176-187	-	0.901	1.146	-	-	-	-	-
6	ZRC 1975.3.5.176-187	-	0.789	0.943	1.109	0.588	0.488	0.100	0.354
7	ZRC 1975.3.5.176-187	-	0.803	0.962	1.068	0.520	0.390	0.130	0.351
8	ZRC 1975.3.5.176-187	-	0.832	0.980	1.111	0.500	0.386	0.114	0.336
9	ZRC 1975.3.5.176-187	-	0.820	0.946	1.101	0.524	0.399	0.125	0.346
10	ZRC 1975.3.5.176-187	-	0.761	0.921	1.18	0.535	0.374	0.161	0.324
11	ZRC 1975.3.5.176-187	-	0.725	0.876	1.016	0.562	0.384	0.178	0.324
12	ZRC 1975.3.5.176-187	-	0.751	0.901	0.996	0.480	0.366	0.114	0.341

Shell of *Rhiostoma spelaeotes*

No.	Co. No.	In.No.	MI	MA	SW	SH	AH	SP	AP
1	ZRC 1975.3.5.196-199	-	1.210	1.432	1.705	-	-	-	0.498
2	ZRC 1975.3.5.196-199	-	1.210	1.450	1.658	0.916	0.672	0.244	0.483
3	ZRC 1975.3.5.196-199	-	1.194	1.444	1.647	0.753	0.644	0.109	0.499
4	ZRC 1975.3.5.196-199	-	1.000	1.193	1.422	0.740	0.558	0.182	0.430

Abbreviation:

Co.No. refers Collection number

No. refers Number

In.No. refers Individual Number

ZRC refers Zoological Reference Collection, National University of Singapore



# Appendix IV

## Statistic analysis

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
MI_MA	Between Groups	3.501E-02	14	2.501E-03	8.059	.000
	Within Groups	.309	996	3.103E-04		
	Total	.344	1010			
SW_MA	Between Groups	26.402	14	1.886	374.148	.000
	Within Groups	5.020	996	5.040E-03		
	Total	31.423	1010			
SH_MA	Between Groups	16.432	14	1.174	165.969	.000
	Within Groups	7.044	996	7.072E-03		
	Total	23.476	1010			
AH_MA	Between Groups	18.150	14	1.296	216.448	.000
	Within Groups	5.966	996	5.990E-03		
	Total	24.116	1010			
SP_MA	Between Groups	.286	14	2.040E-02	23.657	.000
	Within Groups	.859	996	8.623E-04		
	Total	1.144	1010			
IA_MA	Between Groups	66.120	14	4.723	335.401	.000
	Within Groups	14.025	996	1.408E-02		
	Total	80.145	1010			
OA_MA	Between Groups	137.821	14	9.844	373.253	.000
	Within Groups	26.216	994	2.637E-02		
	Total	164.037	1008			
AP_MA	Between Groups	1.158	14	8.271E-02	136.066	.000
	Within Groups	.605	996	6.078E-04		
	Total	1.763	1010			



**Post Hoc Tests**

**Homogeneous Subsets**

MI\_MA

Duncan<sup>a,b</sup>

SPECIES	N	Subset for alpha = .05					
		1	2	3	4	5	6
R. housei	189	.844290					
R. sp.7	25	.844925	.844925				
R. chupingense	76	.847705	.847705	.847705			
R. hainesi	51	.847974	.847974	.847974			
R. sp.4	116	.849747	.849747	.849747			
R. sp.1	45	.850086	.850086	.850086			
R. sp.2	100	.852166	.852166	.852166	.852166		
R. jalorensis	147	.852600	.852600	.852600	.852600		
R. sp.9	36	.852944	.852944	.852944	.852944		
R. sp.3	100		.854964	.854964	.854964	.854964	
R. samuiense	15			.855870	.855870	.855870	
R. sp.8	41				.861315	.861315	
R. sp.5	33				.861639	.861639	
R. sp.6	30					.863881	
P. asiphon	7						.885849
Sig.		.097	.051	.118	.061	.068	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.536.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

SW\_MA

Duncan<sup>a,b</sup>

SPECIES	N	Subset for alpha = .05								
		1	2	3	4	5	6	7	8	
R. sp.3	100	1.062024								
R. sp.8	41	1.097711	1.097711							
R. sp.2	100	1.097865	1.097865							
R. sp.7	25		1.103811							
P. asiphon	7		1.104888							
R. sp.4	116		1.105589							
R. housei	189			1.168061						
R. samuiense	15				1.291584					
R. chupingense	76					1.348116				
R. jalorensis	147					1.369999	1.369999			
R. sp.1	45					1.377424	1.377424			
R. sp.9	36					1.385572	1.385572			
R. sp.6	30						1.399857			
R. hainesi	51							1.532922		
R. sp.5	33									1.685785
Sig.		.053	.698	1.000	1.000	.051	.123	1.000		1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.536.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

SH\_MA

Duncan<sup>a,b</sup>

SPECIES	N	Subset for alpha = .05						
		1	2	3	4	5	6	7
R. sp.8	41	.590626						
R. sp.2	100	.602168						
R. sp.7	25	.606854	.606854					
P. asiphon	7	.616486	.616486					
R. sp.3	100	.623063	.623063					
R. sp.4	116		.648541	.648541				
R. housei	189			.678306				
R. samuiense	15				.729405			
R. chupingense	76					.787520		
R. sp.1	45					.823656		
R. jalorensis	147					.829586		
R. sp.9	36					.831478		
R. sp.6	30						.894139	
R. sp.5	33							1.030935
R. hainesi	51							1.038992
Sig.		.170	.067	.153	1.000	.053	1.000	.699

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.536.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ศูนย์วิจัยสุขภาพ  
จุฬาลงกรณ์มหาวิทยาลัย

AH\_MA

Duncan<sup>a,b</sup>

SPECIES	N	Subset for alpha = .05						
		1	2	3	4	5	6	7
R. sp.3	100	.400076						
R. sp.2	100	.411057						
R. sp.8	41	.413529						
R. sp.7	25	.416680						
P. asiphon	7	.417477						
R. sp.4	116	.430977						
R. housei	189		.484289					
R. samuiense	15			.563201				
R. chupingense	76				.618504			
R. jalorensis	147				.645281			
R. sp.1	45				.647453			
R. sp.9	36				.653930			
R. sp.6	30					.701141		
R. hainesi	51						.820887	
R. sp.5	33							.867072
Sig.		.164	1.000	1.000	.092	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.536.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ศูนย์วิจัยทางการแพทย์  
จุฬาลงกรณ์มหาวิทยาลัย

SP\_MA

Duncan<sup>a,b</sup>

SPECIES	N	Subset for alpha = .05					
		1	2	3	4	5	6
R. sp.5	33	.163795					
R. samuiense	15	.167162					
R. chupingense	76	.168800					
R. sp.1	45	.176967	.176967				
R. sp.9	36	.178297	.178297	.178297			
R. sp.8	41		.185179	.185179	.185179		
R. jalorensis	147		.187742	.187742	.187742		
R. sp.7	25		.190174	.190174	.190174		
R. sp.2	100		.191889	.191889	.191889		
R. sp.6	30		.193321	.193321	.193321		
R. housei	189			.193680	.193680		
P. asiphon	7				.199009	.199009	
R. hainesi	51					.212513	.212513
R. sp.4	116						.217312
R. sp.3	100						.222995
Sig.		.076	.051	.068	.103	.064	.176

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.536.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

จุฬาลงกรณ์มหาวิทยาลัย

IA\_MA

Duncan<sup>a,b</sup>

SPECIES	N	Subset for alpha = .05							
		1	2	3	4	5	6	7	8
P. asiphon	7	.000000							
R. sp.3	100	3.13144E-03							
R. sp.2	100		.121852						
R. sp.7	25		.136904						
R. sp.8	41		.163698						
R. sp.4	116		.177129						
R. housei	189			.352192					
R. samuiense	15				.444905				
R. chupingense	76					.553401			
R. jalorensis	147					.582733			
R. sp.9	36					.587250			
R. sp.1	45						.654297		
R. sp.6	30						.687636		
R. hainesi	51							.796000	
R. sp.5	33								.956026
Sig.		.915	.086	1.000	1.000	.281	.257	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.536.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ศูนย์วิทยุแพทยศาสตร์  
จุฬาลงกรณ์มหาวิทยาลัย

OA\_MA

Duncan<sup>a,b</sup>

SPECIES	N	Subset for alpha = .05								
		1	2	3	4	5	6	7	8	9
P. asiphon	7	.000000								
R. sp.3	100	4.41622E-03								
R. sp.2	100		.170603							
R. sp.7	25		.209997							
R. sp.8	41		.246066							
R. sp.4	115		.248218							
R. housei	188			.468845						
R. samuiense	15				.676029					
R. chupingense	76					.818628				
R. jalorensis	147					.847294	.847294			
R. sp.1	45					.890980	.890980	.890980		
R. sp.9	36						.929493	.929493		
R. sp.6	30							.937250		
R. sp.5	33								1.148712	
R. hainesi	51									1.287050
Sig.		.913	.078	1.000	1.000	.089	.053	.282	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.529.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

AP\_MA

Duncan<sup>a,b</sup>

SPECIES	N	Subset for alpha = .05					
		1	2	3	4	5	6
R. sp.8	41	.309606					
R. sp.4	116	.316165					
R. sp.7	25		.333562				
R. sp.2	100		.335326				
R. sp.3	100		.337507				
R. housei	189			.356143			
P. asiphon	7			.359359			
R. sp.6	30			.359727			
R. chupingense	76				.382480		
R. sp.1	45				.386241		
R. samuiense	15				.387434		
R. jalorensis	147				.389740		
R. sp.9	36				.392930		
R. sp.5	33					.409657	
R. hainesi	51						.445226
Sig.		.283	.547	.585	.130	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 32.536.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ศูนย์สัตวแพทย์  
จุฬาลงกรณ์มหาวิทยาลัย



## Biography

Mr. Sakboworn Tumpeesuwan was born on the 6<sup>th</sup> September 1976 in Mueang District, Ratchaburi Province. He obtained his bachelor's degree of science in biology in 1999 from the Department of Biology, Faculty of Science Chulalongkorn University. He continued his graduated study for master degree of science in zoology at the same institute in 1999. He received grant supports from the university Development Committee (UDC) on requirement of Walailak University and research grant from Biodiversity Research and Training Program (BRT).



ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย