

Submitted by **JOSH ENGELBERT** and **MELISSA PATRICK**, Department of Biological Sciences, Arkansas State University, P.O. Box 599, State University, Arkansas 72467-0599, USA (e-mail: josh.engelbert@smail.astate.edu).

**TROPIDODRYAS STRIATICEPS** (Jiboinha). BRAZIL: BAHIA. MUNICIPALITY OF PALMEIRAS: Vale do Capão, 12°31'S, 41°33'W. 14 August 2003. Collector unknown. Verified by G. Puerto. Coleção de Répteis do Museu de Zoologia da Universidade Federal da Bahia, Salvador, Bahia, Brazil (UFBA-SER 1380). Species previously known from Rio Grande do Sul to Bahia states in Brazil (Argôlo 1999. Herpetol. Rev. 30:56; Hofstadler-Deiques and Di-Bernardo 2004. Herpetol. Rev. 25:193; Lema 2002. Os Répteis do Rio Grande do Sul: atuais e fósseis – biogeografia – ofidismo. Edipucrs, Porto Alegre, 264 pp.; Thomas and Dixon 1977. The Pearce-Sellards Series 27:1–20). Northernmost locality for the species, extends range ca. 280 km N from Barra do Choça, the previously known northern locality (Argôlo 1999, *op. cit.*)

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## New Herpetofaunal Records from Vietnam

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Between 1997 and 2005, increased survey effort and closer examination of natural history collections have resulted in the description of 53 new species of amphibians and 27 new species of reptiles from Indochina (Laos, Cambodia, and Vietnam). Over that same time period, range extensions into Indochina of 36 amphibian species and 33 reptile species were recorded. Despite this increase in knowledge, the diversity of the region remains imperfectly known, as new discoveries continue to be published at a rapid pace; in 2006 (up until mid-November) six species of amphibians, one species of snake, and one species of lizard were described from the region, along with 37 new country or provincial records (Bain and Stuart 2006 [2005]; Bain et al. 2006; Ohler and Delorme 2006; Orlov, Ananjeva, and Ho 2006; Orlov, Dutta et al.

2006; Orlov, Nguyen, and Nguyen 2006; Stuart 2006; Stuart and Emmett 2006; Stuart et al. 2006; Ziegler and Le 2006; Ziegler, Ohler et al. 2006; Ziegler, Thanh et al. 2006). Herein, we provide one novel country record and 60 novel provincial records for Vietnam. We feel that specific locality and voucher data is crucial to understanding patterns of diversity, so we include species that have been reported in the literature, but without reference to specific locality or voucher material. We comment on those records that have been reported on in only a general way, and we provide novel natural history information for recently described species that are very poorly known. Our taxonomy follows Frost et al. (2006), Malhotra and Thorpe (2004), Schmitz et al. (2004), and Utiger et al. (2002). Referred specimens are housed either at the Institute of Ecology and Biological Resources, Hanoi (IEBR), or the American Museum of Natural History, New York (AMNH). Specimens on long term custodial loan from IEBR to AMNH are assigned dual catalogue numbers (e.g., AMNH XXXX/IEBR YYYY).

AMPHIBIA  
ORDER ANURA

FAMILY BUFONIDAE

*Ingerophrynus macrotis*. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune: IEBR 2303, 16°14.529'N, 107°27.354'E, elev. ~ 150 m, 17 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran. A Roang Commune: AMNH A-169338, nr. 16°04.636'N, 107°29.290'E, elev. ~ 650 m, 26 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho; from undergrowth on a bank, of a rocky stream in primary forest. *Ingerophrynus macrotis* is a widespread species (Myanmar, Thailand, Laos, and Cambodia), but in Vietnam voucher specimens have only been reported from Dak Lak Province (Buon Geng District [= Buon Giang Lanh]) (Bourret 1942; Inger et al. 1999; Nguyen and Hoang 2000; Ohler et al. 2002; Smith 1930; Stuart 2005b; Taylor 1962).

FAMILY MICROHYLIDAE

*Microhyla marmorata*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune: AMNH A-169291, nr. 16°04.636'N, 107°29.290'E, elevation ~ 650 m, 29 August 2005, R. H. Bain and T. Q. Nguyen; AMNH A-169292, elevation ~ 680 m, 30 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho. Both specimens were collected along leaf litter around forest ponds. Dozens of males were calling in and around the pond: floating on the surface, atop herbaceous undergrowth (< 5 cm from the ground), atop fallen logs, and from the leaf litter. In life the oblique shape on the dorsum and head is green-grey, outlined with white; spots along the dorsum, legs, and flanks are black, outlined in white; white lines run along the dorsum and legs; limbs pinkish with brown bands; the remainder of the dorsum mottled yellow; venter brown, mottled with yellow on chest and belly. This species is known from Ha Tinh (Huong Son, Ky Anh-Ke Go Districts), Quang Binh (Phong Nha District), and Quang Nam (Tra My District) Provinces in Vietnam, as well as Khammouan and Bolikhamxay Provinces in Laos (Bain and Nguyen 2004a).

FAMILY MEGOPHRYIDAE

*Brachytarsophrys feae*. LAO CAI PROVINCE, Van Ban District, Nam Tha Commune, forest above Nam Tha River: AMNH A-168658, nr. 21°55'13" N, 104°22'15" E, elevation 950 m, 7 Sep-

tember 2004, R. H. Bain. AMNH A-168659, 168660, 21°54'56"N, 104°21' 39" E, elevation 1300–1400 m, 11–12 September 2004, R. H. Bain, T. Q. Nguyen, K. V. Doan, A. C. Lu, and V. T. Trieu. AMNH A-168658 was collected from a pitfall trap set in mixed hardwood and bamboo forest between two tributaries of the Nam Tha. AMNH A-168659, 660 were collected under leaves on the forest floor, > 20 m from a small stream. Within Vietnam, this species has been reported from Lang Son (Mao Son [= Mau Son]), and Vinh Phuc (Tam Dao N.P.) (Bourret 1942; Inger et al. 1999). Orlov et al. (2002) include 'northern Vietnam' in the distribution, Nguyen, Ho, and Nguyen (2005) note this species from Lao Cai Province, and Ho et al. (2005) note this from Cao Bang (Nguyen Binh District), but without reference to precise locality or voucher specimens. It is otherwise known from Myanmar, Thailand, and China (Yunnan Province) (Bourret 1942; Fei et al. 2005; Taylor 1962).

*Leptobrachium banae*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune: AMNH A-169283, 16°04.877'N, 107°28.424'E, elevation ~ 850–900 m, 28 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho; collected from the bank of a cascading, rocky stream, a few meters from the water. IEBR 2304 nr. 16°04.636'N, 107°29.290'E, elevation ~ 650 m, 29 August 2005, R. H. Bain and T. Q. Nguyen; on the stream bank. Color in life as in holotype with the following exceptions: limb bands and flank spots orange; venter grey, spotted with white on throat and thighs, marbled with white on chest and belly. Within Vietnam, this species is only known from its type locality in Gia Lai Province (An Khe District [= K Bang]) (Lathrop et al. 1998). Nguyen, Ho, and Nguyen (2005) note this from Quang Nam Province, but without reference to voucher specimens or specific locality. This species has also been reported from Xe Kong Province, Laos (Stuart 2005b).

*Leptotalax pluvialis*. HA GIANG PROVINCE, Vi Xuyen District, Cao Bo Commune, Mount Tay Con Linh II: AMNH A-163833–163834, 22°46'18"N, 104°49'12"E, elevation 1710 m, 10 September 2000, C. Johnston; from a small pan trap set in the forest floor. They were erroneously reported as juveniles of *L. bourreti* (Bain and Nguyen 2004b), but subsequent analysis showed that these were adults of *L. pluvialis*. This is the first record of this species east of the Red River. It is otherwise only known from the type locality on Mt. Fan Si Pan, Lao Cai Province (Ohler et al. 2000).

*Leptotalax sungi*. LAO CAI PROVINCE, Van Ban District, Nam Tha Commune, tributary to Khe Pan River: AMNH A-168676–168677, 21°56'39"N, 104°24'12"E, elevation 331 m, 17 September 2004, R. H. Bain, K. V. Doan, and V. T. Trieu. AMNH A-168676 was collected on an embankment ~ 5 m from the stream's edge atop an herbaceous leaf (~ 2 m off the ground), and AMNH A-168677 was collected on the ground of a flat, rocky stream bank, ~ 1.5 m from the edge of the water. These specimens have distinct day and night coloration. At night, the dorsum is a solid red-brown with creamy yellow tubercles towards the sacrum; flank yellow, with some black speckling; limbs banded with light brown; canthus and supratympanic fold each creamy yellow above, with thick dark brown line below; loreal red-brown, with two dark spots, upper lip with three dark spots. In the day, the color is the same except that the dorsum is creamy with irregular brown splotches;

a black loreal spot extends above canthus; dorsal tubercles red-brown; finger tips white. This species is otherwise known only from the type locality of Vinh Phuc Province (Tam Dao N.P.) (Lathrop et al. 1998). This is the first record of it west of the Red River. Nguyen, Ho, and Nguyen (2005) note this species from Van Yen District, Yen Bai Province, but without reference to precise locality or voucher specimens.

*Leptotalax tuberosus*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune: AMNH A-169283, 16°04.877'N, 107°28.424'E, elevation ~ 850–900 m, 28 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho. Calling from atop a shrub on a steep bank, ~ 1 m above the ground, 5 m from the edge of a cascading, rocky stream in disturbed primary forest. In life, dorsum sandy with green hatching pattern; brown spots on upper lip and posterior portion of tympanum; limbs with olive green bands; iris sandy-gold, upper one-quarter peach, with thick network of deep indigo. This species is only known from two other provinces in Vietnam, Gia Lai (An Khe District [= K Bang]) and Quang Nam (Tra My District) (Bain and Nguyen 2002a; Inger et al. 1999).

*Ophryophryne gerti*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune, A Pat Stream, above Ho Chi Minh Highway marker kilometer 398 + 700: AMNH A-169287, nr. 16°04.636'N, 107°29.290'E, elevation ~ 680 m, 30 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho. This was collected sitting on a leaf atop a small shrub (< 1 m), beside a rocky-bottomed stream. QUANG NAM PROVINCE, Tra My District, Tra Don Commune: AMNH A-163668, nr. 15°11.688'N, 108°02.413'E, elevation 980 m, 17 March 1999, T. Q. Nguyen. In life, dorsum brown, butterfly markings and irregular patterns darker brown, outlined in tan; dorsal ridges, including supratympanic fold, outlined in tan; loreal, upper lip, tympanic regions, and anterior portion of upper arm dark brown, continuing as a sash on forearm; front of knee, leg bands dark brown; flank tan, with anterior grey wash; flank tubercles black below, tan above; iris orange-brown. In Vietnam, this species is otherwise only known from Gia Lai (An Khe District [= K Bang]) and Lam Dong (Cam Li, Dran) Provinces (Ohler 2003). It has also been reported from Champasak Province, Laos (Stuart 2005b).

*Ophryophryne hansii*. THUA THIEN-HUE PROVINCE, Huong Thuy District, Khe Dau, Duong Hoa Commune, tributary to Dau River: AMNH A-169286, nr. 16°17.995'N, 107°33.307'E, elevation ~ 109 m, 8 September 2005, R. H. Bain, T. Q. Nguyen, C. K. Dang, and T. D. Nguyen; in leaf litter, a few meters from edge of a stream. A Luoi District: Huong Nguyen Commune, Vu Vu Stream: AMNH A-169284, 16°14'30"N, 107°29'23"E, elevation ~ 100 m, 20 August 2005, R. H. Bain, T. Q. Nguyen, and M. V. An. In Vietnam, this species is also known from Quang Binh Province (Phong Nha-Ke Bang), Quang Nam Province (Tra My District) and Gia Lai Province (An Khe District [= K Bang]) (Frost et al. 2006; Ohler 2003; Ziegler, Ohler et al. 2006). The specimen reported by Frost et al. (2006), AMNH A-163669 from Quang Nam, has dorsum dark brown, with irregular light brown markings; limbs with light brown markings forming bands; dorsal tubercles either red-brown or tan; iris grey-brown. This species has also been reported from Laos (Bolikhamsay, Khammouan, and Xe Kong Provinces), and Cambodia (Stung Treng Province) (Stuart 2005b; Stuart et al. 2006).

*Ophryophryne microstoma*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune: AMNH A-169285, nr. 16°04.636'N, 107°29.290'E, elevation ~ 680 m, 23 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho. LAO CAI PROVINCE, Van Ban District, Nam Tha Commune, tributary to Khe Pan River: AMNH A-168682, 21°56'39"N, 104°24'12"E, elevation 331 m, 17 September 2004, R. H. Bain, K. V. Doan, and V. T. Trieu. In Vietnam, this species is also known from a wide latitudinal range of provinces: Ha Giang (Yen Minh District), Cao Bang (Nguyen Binh), Lang Son (Mao Son [= Mau Son]), Vinh Phuc (Tam Dao N.P.), and Gia Lai (An Khe District [= K Bang]) (Bain and Nguyen 2004b; Inger et al. 1999; Ohler 2003). This species has also been reported from Thua Thien-Hue (A Luoi), Lao Cai (Van Ban), Hai Duong (Chi Linh), Thanh Hoa (Ben En), Quang Tri (Dong Tam Ve), but without reference to specific locality data or voucher information (Ho et al. 2001; Ho et al. 2005; Nguyen, Ho, and Nguyen 2005; Nguyen, Nguyen, and Ho 2005). It is otherwise known from Thailand and Yunnan Province, China (Fei et al. 2005; Ohler 2003).

*Ophryophryne pachyproctus*. HA TINH PROVINCE, Huong Son District, Rao An region, tributaries of Rao An River: AMNH A-161358, 18°21'53"N, 105°13'13"E, elevation 200 m, 12 May 1998, D. A. Kizirian, and T. Q. Nguyen. In Vietnam, this species has been reported from two provinces, Vinh Phuc (Tam Dao N.P.) and Nghe An (Inger et al. 1999; Ohler 2003). Nguyen, Ho, and Nguyen (2005) report this from Huong Son District and other provinces, but without reference to specific locality data or voucher information. It is otherwise known from Yunnan Province, China (Fei et al. 2005; Ohler 2003).

#### FAMILY DICROGLOSSIDAE

*Limnonectes hascheanus*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune: AMNH A-169294, nr. 16°04.285'N, 107°29.499'E, elevation ~ 680–820 m, 27 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho; calling from a mud burrow, about 3 m from low-flowing water. This specimen was one of several males of this species calling alongside the stream. NGHE AN PROVINCE, Con Cuong District, Chau Khe Commune, Hieng Stream: AMNH A-161224, 19°2'17"N 104°42'6"E, elevation 300 m, 29 April 1998, T. Q. Nguyen. LAM DONG PROVINCE, Da Teh District, Quoc Oai Commune: IEBR 1263, nr. 11°41.010'N, 107°32.032'E, elevation 630 m, 6 May 2003, T. Q. Nguyen. This specimen was collected from a small puddle on a logging road. In Vietnam, this species has been reported from Lao Cai (Thai Nien) and Quang Binh (Phong Nha District) Provinces (Bourret 1942; Ziegler 2002; Ziegler et al. 2004). This species has also been reported from Ha Tinh (Khe Tho-Ke Do), Quang Tri (Dak Rong, Huong Hoa), and Dong Nai (Cat Tien) Provinces, as well as from 'central and northern regions of Annam mountains,' but without specific locality or voucher information (Le 2005; Nguyen and Ho 2002; Orlov et al. 2002). This is a widespread species across continental southeast Asia and the Greater Sunda islands (Smith 1930).

*Limnonectes poilani*. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune, Da Stream: AMNH A-169295, 16°15.625'N 107°26.634'E, elevation ~ 160 m, 16 August 2005, R. H. Bain, Q. T. Nguyen, and X. A. Tran; collected in the mud of a slow-moving portion of the stream surrounded by secondary

forest. A Lieng Stream: AMNH A-169296, 16°14.185'N 107°27.669'E, elevation ~ 160 m, 17 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran. A Bong stream: AMNH A-169297, 16°14.285'N, 107°27.177'E, elevation, ~ 150 m, 19 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran. LAM DONG PROVINCE, Da Teh District, Quoc Oai Commune: IEBR 1261, nr. 11°41.010'N, 107°32.032'E, elevation 630 m, 5 May 2003, T. Q. Nguyen. This was described from Quang Tri Province (Dong Tam-Ve), and has been reported from Quang Nam Province (Tra My District), Quang Binh Province (Minh Hoa), and (as *L. cf. blythii*) Gia Lai Province (An Khe District [= K Bang]) (Bourret 1942; Frost et al. 2006; Inger et al. 1999; Ngo et al., 2006; Ziegler, Ohler et al. 2006). This species has been reported from A Luoi District, and Cat Tien N.P., Dong Nai Province (both as *L. blythii*), but without exact locality or voucher information (Ho 2002b; Nguyen and Ho 2002; Nguyen, Ho, and Nguyen 2005). This species is also known from Mondolkiri Province, Cambodia (Stuart et al. 2006).

*Occidozyga martensii*. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune: AMNH A-16928, 16°14.529'N, 107°27.354'E, elevation, ~ 150 m, 17 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran; floating in amplexus, in a large buffalo wallow. This species is also reported from Ha Tinh (Huong Son District), Quang Binh (Phong Nha District), Dac Lak (Yok Don), Gia Lai (An Khe District), and Ba Ria-Vung Tau (Con Dao) Provinces (Frost et al. 2006; Inger et al. 1999; Ngo et al. 2006; Smith 1920; Ziegler 2002; Ziegler et al. 2004). It has also been reported from Lao Cai (Van Ban), Son La (Sop Cop, Xuan Nha), Thanh Hoa (Ben En), Nghe An (Pu Mat, Pu Huong) Quang Nam (Phuoc Son), Thua Thien-Hue (A Luoi), Dong Nai (Cat Tien), but without reference to locality or voucher specimens (Le and Hoang 2001; Le and Nguyen 1999; Ho 2002b; Hoang et al. 2005; Nguyen 2005; Nguyen, Nguyen, and Ho 2005; Nguyen and Ho 2002; Nguyen and Hoang 2000). It is also known from Thailand, Laos (Champasak, Vientiane, Bolikhamxay, and Attapeu Provinces), China (Yunnan, Hainan, and Guangxi Provinces), and the Cardamom Mountains of Cambodia (Fei et al 2005; Ohler et al. 2002; Stuart 2005b; Taylor 1962; Teynie et al. 2004).

#### FAMILY RANIDAE

*Amolops cremnobatus*. QUANG BINH PROVINCE, Minh Hoa District, Cha Lo: AMNH A-161141, 14 April 1998, D. A. Kizirian, and T. Q. Nguyen. This species has previously been reported from neighboring Ha Tinh Province (Huong Son District) and Nghe An Province (Con Cuong District) (Bain and Nguyen 2001; Chen et al. 2005). Outside of Vietnam, this species is known from Vientiane Municipality, and Khammouan and Bolikhamxay Provinces of Laos (Inger and Kottelat 1998; Stuart 2005b).

*Huia absita*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune, A Pat Stream, above Ho Chi Minh Highway marker kilometer 398 + 700: AMNH A-169302, 16°4'28"N, 107°29'14"E, elevation ~ 653 m, 23 August 2005, R. H. Bain, T. Q. Nguyen, V. S. Ho, and V. T. Le; alongside a stream in a patch of grass. KON TUM PROVINCE, Kon Plong District, Mang But Commune, nr. Vi Xay Village, Nuoc Re Stream: IEBR 307, 315, 316, 14°45.665'N, 108°15.245'E, elevation 1120–1200 m, 3–4 January 2001, T. Q. Nguyen. Mang Canh Commune, Nuoc Ka

Stream: IEBR 337, 14°41.950'N, 108°12.095'E, elevation 1100–1200 m, 10 January 2001, T. Q. Nguyen. The Kon Tum specimens were all collected in small streams in mixed evergreen-bamboo forest in humid weather. This species is currently only known from Quang Nam Province (Tra My District), Vietnam (Bain and Nguyen 2005), and Xe Kong and Saravane Provinces, Laos (Stuart and Chan-ard 2005). Orlov, Ananjeva, and Ho (2006) described a new species of cascade ranid, *Rana gigatympana*, from Kon Tum Province (Kon Plong District), which looks remarkably like *Huia absita*, although it exhibits a much larger tympanum (male tympanum diameter: eye diameter 1.14–1.31 for *R. gigatympana*, 0.60–0.89 for *H. absita*). The tympanum diameter of our specimens from Kon Plong (all males), however, fell well within the range of *Huia absita* (tympanum diameter: eye diameter 0.69–0.92).

*Huia bacboensis*. LAO CAI PROVINCE, Van Ban District, Nam Tha Commune, tributary to Khe Pan River: AMNH A-168739, 21°56'24"N, 104°24'7"E, elevation 360–400 m, 15 September 2004, R. H. Bain, K. V. Doan, and V. T. Trieu. This species is otherwise known from the following provinces: Tuyen Quang (Na Hang Nature Reserve), Bac Kan (Ba Be National Park), and Nghe An (Con Cuong) (Bain et al. 2003).

*Huia banaorum*. HA TINH PROVINCE, Huong Son District, Huong Son Reserve, Rao An region: AMNH A-161249–161250, 18°22'N, 105°13'E, elevation 200 m, 20 April 1998, T. Q. Nguyen. This species has otherwise only been reported from An Khe District (= K Bang), Gia Lai Province in Vietnam (Bain et al. 2003), and from Mondolkiri, Stung Treng, and Ratanakiri Provinces of eastern Cambodia (Stuart et al. 2006). Nguyen, Ho, and Nguyen (2005) report this species from Danang (Ba Na N.P.), but without reference to specific locality or voucher information.

*Huia khalam*. KON TUM PROVINCE, Kon Plong District, Mang But Commune: IEBR 231, 250, 251, 268–270, 286, 288, 312. 14°45.657'N, 108°15.835'E, elevation 1400–1540 m, 28 December 2000–4 January 2001, T. Q. Nguyen. This species has only been reported from Thua Thien-Hue (Bach Ma N. P.) and Da Nang (Ba Na N. P.) Provinces in Vietnam, and Xe Kong (Kaleum District) and Saravane (Samoy District) Provinces in Laos (Stuart et al. 2005).

*Huia morafkai*. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune, A Lieng Stream: AMNH A-169309, 16°14'11"N, 107°27'40" E, elevation ~ 160 m, 17 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran; from a branch ~ 4 m off the ground, ~ 3 m from the side of the stream. AMNH A-169311–169312: A Roang Commune, forested stream at Ho Chi Minh Highway marker kilometer 398+700, 16°4'28"N 107°29'14" E, elevation ~ 653 m, 26 August 2005, R. H. Bain, N.Q. Nguyen, and V. S. Ho; from rocky cascades. AMNH A-169313: 16°4'53"N, 107°28'25"E, elevation ~ 850–900 m, 28 August 2005, R. H. Bain, N.Q. Nguyen, and V. S. Ho; from rocky cascades. In Vietnam, this species has previously been reported from the following provinces: Ha Tinh (Huong Son District), Quang Nam (Tra My District), and Gia Lai (An Khe District [= K Bang]), (Bain et al. 2003; Bain and Stuart 2006 [2005]). It is otherwise known from Champasak and Xe Kong Provinces in Laos, and Ratanakiri and Mondolkiri Provinces of Cambodia (Bain and Stuart 2006 [2005]; Stuart et al. 2006; Teynie et al. 2004).

*Huia orba*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune, stream at Ho Chi Minh Highway marker kilometer 398 + 700: AMNH A-169314, 16°4'28"N, 107°29'14"E, elevation ~ 653 m, 23 August 2005, R. H. Bain, T. Q. Nguyen, V. S. Ho, and T. V. Le; atop a small fern (< 1 m off the ground), ~ 3 m from the bank of a swift, rocky bottomed stream. This species is otherwise only known from Ha Tinh Province (Huong Son District) in Vietnam, and eastern portions of Khammouan and Bolikhamxay Provinces of Laos (Stuart and Bain 2005).

*Sylvirana attigua*. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune: AMNH A-169303, nr. 16°14'26"N, 107°27'11"E, elevation ~152 m, 19 August 2005, R. H. Bain, T. Q. Nguyen, and V. M. Tran; from a small branch above a small, still, streamside pool. Vu Vu Stream: AMNH A-169304, 16°14'30"N, 107°29'23"E, 20 August 2005, R. H. Bain, T. Q. Nguyen, and M. V. Tran. A Roang Commune, stream at Ho Chi Minh Highway marker kilometer 398 + 700: AMNH A-169305, nr. 16°4'28"N, 107°29'14"E, elevation ~ 653 m, 26 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho; on a leaf about 0.5 m above the ground, 2 m from the stream. Nam Dong District, Thuong Lo Commune, tributary to Cha May River: AMNH A-169306, 16°7'40"N, 107°44'44"E, elevation 220–270 m, 2 September 2005, R. H. Bain, T. Q. Nguyen, and V.P. Nguyen; collected atop a small stick over a tiny pool of water in the forest. This species has been reported from Quang Nam (Tra My District), and Gia Lai (An Khe District [= K Bang]) Provinces (Bain and Nguyen 2002b; Inger et al. 1999). This species has been reported from Thua Thien-Hue Province and Kon Tum Province (Ngoc Linh Mountain, and Kon Plong District), but without precise locality data or voucher specimen information (Nguyen 2002; Nguyen, Ho, and Nguyen 2005). It is otherwise known from Champasak and Xe Kong Provinces in Laos and Mondolkiri Province in Cambodia (Stuart 2005b; Stuart et al. 2006).

*Sylvirana maosonensis*. BAC KAN PROVINCE, Ba Be Lake National Park, ca. 1 km W on trail into forest from shoreline on west end of Lake: AMNH A-161488, 8 August 1997, D. R. Frost, and C. J. Raxworthy. In Vietnam, this species is known from the following provinces Ha Giang (Vi Xuyen District), Lang Son (Mau Son), Vinh Phuc (Tam Dao N.P.), Ha Tinh (Khe Tho- Ke Do), and Quang Binh (Minh Hoa) (Bain and Nguyen 2004b; Bourret 1942; Inger et al. 1999; Ziegler 2002; Ziegler, Ohler et al. 2006). This species has been reported from other northeastern provinces of Vietnam, but without reference to specific localities or voucher specimens (Ho et al. 2001; Ho et al. 2005; Nguyen 2005; Nguyen et al. 2000; Nguyen, Ho, and Nguyen 2005; Orlov et al. 2002). This species has also been reported from Bolikhamxay and Khammouan Provinces of Laos (Stuart 2005b).

#### FAMILY RHACOPHORIDAE

*Chiromantis vittatus*. THUA THIEN HUE PROVINCE, A Luoi District, Huong Nguyen Commune: A169316, 169317, 169337, 16°14'32"N, 107°27'21"E, 17 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran; in amplexus on a branch above a buffalo wallow. The green eggs were also collected from the foam nest. Several other pairs were in amplexus in and around the wallow. In Vietnam, this species is known from the following provinces: Quang Binh (Phong Nha District), Ha Tinh (Chin Xai), Gia Lai

(An Khe District [= K Bang]), and Ba Ria-Vung Tau (as Cap St. Jacques) (Bourret 1942; Inger et al. 1999; Ziegler 2002; Ziegler et al. 2004). It has also been reported from Lang Son (Huu Lien), Phu Tho (Thanh Son, Ha Hoa), and Dong Nai (Cat Tien), but without reference to locality or voucher information (Ho 2002a; Nguyen and Ho 2002; Nguyen et al. 2000). This species is also known from India, Myanmar, Thailand, China (Xizang, Hainan, Guangxi, Fujian, and Yunnan Provinces), Laos (Vientiane Municipality, Champasak Province), and Cambodia (Cardamom Mountains) (Chanda 2002; Fei et al. 2005; Ohler et al. 2002; Stuart 2005b; Stuart et al. 2006; Teynie et al. 2004; Taylor 1962).

*Philautus banaensis*. THUA THIEN-HUE PROVINCE, Huong Thuy District, Binh Thanh Commune, IEBR 2307, 16°17'58"N, 107°33'18"E, elevation 109 m, 8 September 2005, R. H. Bain, T. Q. Nguyen, C. K. Dang, and T. D. Nguyen; collected calling from atop leaves, ~ 3 m high above a stream. This species is otherwise known from Quang Nam Province (Tra My District) and the type locality in Danang Province (Ba Na) in Vietnam (Bourret 1942; Stuart, *in press*). This species has previously been reported from Thua Thien-Hue and Thanh Hoa Provinces, but without reference to a distinct locality or voucher information (Ho 2002b; Nguyen, Ho, and Nguyen 2005; Nguyen and Hoang 2000; Orlov et al. 2002).

*Rhacophorus annamensis*. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune, Khe Coi Stream: AMNH A-169325, 16°15'32"N, 107°27'15"E, elevation ~ 101 m, 18 August 2005, R. H. Bain, T. Q. Nguyen, and M. V. Tran; from the side of a deep rocky pool. Other specimens were present on small branches overtop of the pool. Huong Thuy District, Binh Thanh Commune: AMNH A-169326, 16°17'49"N, 107°32'48"E, elevation 100–200 m, 9 September 2005, R. H. Bain, T. Q. Nguyen, C. K. Dang, and T. D. Nguyen; on a streamside rock. QUANG NAM PROVINCE, Tra My District, Tra Don Commune: AMNH A-163745, 15°11'41"N, 108°2'25"E, elevation 940 m, 19 March 1999, T. Q. Nguyen; AMNH A-163746, 15°11'41"N, 108°2'32"E, elevation 970 m, 22 March 1999 T. Q. Nguyen; AMNH A-163747, 15°11'30"N, 108°2'23"E, elevation 960–990 m, 13 March 1999, T. Q. Nguyen; AMNH A-163748, 15°11'41"N, 108°2'25"E, elevation 940 m, 26 March 1999, P. R. Sweet. Within Vietnam, this species has been reported from Quang Binh Province (Minh Hoa District, Phong Nha-Ke Bang), Gia Lai Province (An Khe District [= K Bang]), and Lam Dong Province (Daban) (Bourret 1942; Frost et al. 2006; Inger et al. 1999; Ziegler, Ohler et al. 2006). Nguyen, Ho, and Nguyen (2005) report this species from Tra My District and Thua Thien-Hue Province, and Orlov et al. (2002) report this species from Ninh Thuan, Lam Dong, Dak Lak, and Kon Tum Provinces, but neither refer to exact locality or voucher information. It is also known from Mondolkiri Province of Cambodia (Stuart et al. 2006).

*Rhacophorus bipunctatus*. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune: A169333, 16°14'32"N, 107°27'21"E, 17 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran; from foliage overhanging a large buffalo wallow. LAO CAI PROVINCE, Van Ban District, Liem Phu Commune, Cham Vai: IEBR 1197, 21°57.445'N, 104°20.963'E, elevation 1100 m, 28 June 2002, T.Q. Nguyen and H. V. Nguyen; collected from leaves ~ 1 m over a small, rocky stream in disturbed primary forest. In Vietnam, this species has also been reported from Quang

Binh (Phong Nha Khe Bang N.P.), Ha Tinh (Huong Son District), and Gia Lai (An Khe), Provinces (Frost et al. 2006; Inger et al. 1999; Ziegler et al. 2004). Orlov et al. (2002) state that this species ranges from Gia Lai northwards to Ha Tinh Province, but without reference to any specific localities or voucher specimens. This species has been reported from Lao Cai (Van Ban), and Dong Nai (Cat Tien) Provinces, but without any reference to specific localities or voucher information (Nguyen and Ho 2002; Nguyen, Nguyen, and Ho 2005). This wide-ranging species is also known from India, Myanmar, Thailand, Xizang Province in China, Phongsalay and Sayaboury Provinces in Laos, and the Cardamom Mountains of Cambodia (Bourret 1942; Fei et al. 2005; Ohler et al. 2002; Stuart 2005b; Taylor 1962).

*Rhacophorus calcaneus*. HATINH PROVINCE, Huong Son District, Huong Son Reserve, Rao An region: AMNH A-161404, 18°22'N, 105°13'E, elevation 200 m, 21 April 1998, D. A. Kizirian, and T. Q. Nguyen. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune, Da Stream: AMNH A-169328, 163929, 16°15'38"N, 107°26'38"E, 16 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran; calling from thin branches of streamside trees, ~ 2 m off the ground. Little A Ma Stream: AMNH A-169331, 16°15'17"N, 107°26'59"E, elevation ~ 90 m, 21 August 2005, R. H. Bain, T. Q. Nguyen, and M. V. Tran. Nam Dong District, Thuong Lo Commune, tributary to the Cha May River: AMNH A-169332, 16°7'40"N, 107°44'44"E, elevation ~ 220 m, 1 September 2005, R. H. Bain, T. Q. Nguyen, V. P. Nguyen, V. T. Nguyen, and V. M. Ngo; from branch of a streamside tree, ~ 3 m high. In Vietnam, this species has been reported from Gia Lai (An Khe District [= K Bang]), and Quang Nam Provinces (Tra My District), as well as the Lam Vien Plateau (Bourret 1942; Frost 2006; Inger et al. 1999). It has been reported widely from the country (including Thua Thien-Hue and Quang Nam Provinces), but without specific localities or voucher information (Nguyen 2002; Nguyen, Ho, and Nguyen 2005). It is also known from Xe Kong Province, in Laos (Stuart 2005b).

*Rhacophorus exechopygus*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune: IEBR 2011, nr. 16°04.636'N, 107°29.290'E, elevation ~ 680 m, 23 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho; atop a broadleaf on a shrub, ~ 3 m off the ground, ~ 3 m from the stream up a steep embankment. This species is known only from the Vietnamese provinces of Gia Lai (An Khe District [= K Bang]) and Quang Nam (Tra My District) (Bain and Nguyen 2002c; Inger et al. 1999). Orlov et al. (2002) report this species from Kon Tum Province, but without reference to specific locality or voucher information.

*Rhacophorus kio*. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune: AMNH A-169327, 16°14'32"N, 107°27'21"E, 17 August 2005, R. H. Bain, T. Q. Nguyen, and A. X. Tran; in amplexus on a branch overhanging a large buffalo wallow. This species has recently been shown to be separate from *Rhacophorus reinwardtii*, which is currently known from the Greater Sundas and the southern portion of the Malay peninsula. In Vietnam, this species has been reported from the following provinces (as *Rh. reinwardtii*): Lao Cai, Ha Tinh (Chin Xai, Khe Tho, Ke Do), and Gia Lai (An Khe District [= K Bang]) (Inger et al. 1999; Ohler and Delorme 2006; Orlov et al. 2001; Ziegler 2002; Ziegler et al. 2004). Several other accounts across Vietnam are

listed (Cao Bang [Nguyen Binh], Hai Duong [Chi Linh], Son La [Xuan Nha], Thanh Hoa [Thach Thanh, Ben En], Thua Thien-Hue [A Luoi], Da Nang [Ba Na], and Quang Nam [Nam Giang, Tay Giang] Provinces), but without specific locality or voucher information (Ho 2002b; Ho et al. 2001; Ho et al. 2005; Ho and Orlov 2000; Le 2000; Le and Nguyen 1999; Nguyen 2000; Nguyen 2005; Nguyen and Hoang 2000). This widespread species is also known from Thailand (although not on the Malay Peninsula), China (Guangdong, Yunnan Provinces), and Laos (Bokeo, Khammouan, Phongsaly, Huaphahn, Sayabourym Provinces) (Ohler and Delorme 2006; Stuart 2005b).

*Rhacophorus orlovi*. NGHE AN PROVINCE, Con Cuong District, Chau Khe Commune, Ngun Stream: AMNH A-161411, 19°2'17"N, 104°42'6"E, elevation 300 m, 27 April 1998, T. Q. Nguyen and D. A. Kizirian. LAO CAI PROVINCE, Van Ban District, Nam Tha Commune, tributary to Khe Pan River: AMNH A-168770, 21°56'24"N, 104°24'7"E, elevation 360–400 m, 15 September 2004, R. H. Bain, K. V. Doan, and V. T. Trieu; from the stem of a broadleaf plant, 1.5 m above the ground, ~ 4 m from the stream. THUA THIEN-HUE PROVINCE, A Luoi District, Huong Nguyen Commune, Little A Ma Stream: IEBR 2305, 16°15'17"N, 107°26'59"E, elevation ~ 90 m, 21 August 2005, R. H. Bain, T. Q. Nguyen, and M. V. Tran. Within Vietnam, this species is known from the following provinces: Ninh Binh (Cuc Phuong N.P.), Quang Binh (Phong Nha-Khe Bang N.P.), Ha Tinh (Ky Anh-Ke Go), Gia Lai (An Khe District [= K Bang]) (Stuart 2005a; Ziegler and Köhler 2001; Ziegler et al. 2002). It is also known from Thailand and Khammouan Province, Laos (Chan-ard 2003; Stuart 2005b).

REPTILIA  
SUBORDER SAURIA  
FAMILY AGAMIDAE

*Calotes emma*. BAC KAN PROVINCE, Ba Be Lake National Park, cave area, ca 1.5 km E of guest house: AMNH R-147066, 22°24'1"N, 105°37'54"E, 8 August 1997, D. R. Frost, and C. J. Raxworthy. THUA THIEN-HUE PROVINCE, Huong Thuy District, Binh Thanh Commune: AMNH R-154613, stream nr. 16°17'49"N, 107°32'48"E, elevation 100–200 m, 9 September, R. H. Bain, T. Q. Nguyen, C. K. Dang, and T. D. Nguyen. This widespread species has been reported from across continental southeast Asia (e.g., Boulenger 1885; Smith 1935; Stuart et al. 2006; Taylor 1963; Ziegler 2002; Ziegler et al. 2004), however these are new provincial records within Vietnam. Nguyen, Ho, and Nguyen (2005) report this species from Bac Kan, but without reference to specific locality or voucher information.

*Pseudocalotes floweri*. VIETNAM, KON TUM PROVINCE, Kon Plong District, Mang Canh Commune, forest nr. Nuoc Ka Stream: IEBR 330, 14°41.950'N, 108°12.095'E, elevation 1200 m, 10 January 2001, T. Q. Nguyen; in secondary forest. The specimen is female, snout-vent length 68.2 mm; head length nearly twice its breadth; upper labials 8 left side, 10 right side; lower labials 9 left side, 8 right side; eye diameter 4.8 mm (more than twice the tympanum of 2.1 mm); snout length 9.2 mm (nearly twice the orbit diameter); six scales between nasal and supraorbital; nuchal crest with 8 erect spines; length of finger III = IV; 52–56 scales round the middle of the body; tail length 151.2 mm. Body compressed;

upper head scales keeled; series of enlarged scales forming a λ-shaped figure on forehead; dorsal scales feebly keeled, all pointing backwards and downwards; median ventrals small and strongly keeled; 19 scales under finger IV; blade-like outer keels under toe III, not bicarinate; tail compressed, covered with keeled scales. In life, this specimen is brown, enlarged dorsal scales bluish, spines are light brown; radiate dark brown lines around eye to supraorbital ridge; limbs yellow with dark brown irregular bands; dark brown gular spot, and 10 dark brown spots on the tail (which fade in preservative). This species is otherwise known from Chanthaburi, Thailand and the Elephant Mountains (Bokor [= Bokor]), Cambodia (Smith 1935; Taylor 1963; Hallerman and Böhme 2000). This is the first country record for Vietnam. Our specimen is shorter than those previously described (snout-vent length for type specimen 98 mm; 95 mm for referred specimen) (Boulenger 1912; Smith 1935; Taylor 1963 described specimens from Thailand without reporting their snout-vent lengths).

*Pseudocalotes microlepis*. BAC KAN PROVINCE, Ba Be District, Ba Be National Park, cave area, ca 1.5 km E of guest house: AMNH R-147071, 22°24'1"N, 105°37'54"E, 8 August 1997, D. R. Frost, and C. J. Raxworthy. In Vietnam this species is also known from Quang Ninh, Danang (Ba Na), and Lam Dong (Lang Bian, Camley [= Cam Ly]) Provinces (Ziegler, Thanh et al. 2006). Otherwise, it is known from Myanmar, Thailand, China (Hainan Island, Guizhou Province), and Laos (Phong Saly [= Phong Sali Province]) (Bourret 1939b; Smith 1935; Hallerman and Böhme 2000; Zhao and Adler 1993).

FAMILY DIBAMIDAE

*Dibamus greeri*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune: AMNH R-154630/IEBR 2311, nr. 16°04.636'N, 107°29.290'E, elevation ~ 650 m, 26 August, 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho; under a streamside rotting log. This specimen conforms precisely with the description of the holotype, including the diagnostic characters: incomplete medial-rostral nasal suture; one postocular; two supra labials; very large frontal; posteromedial edge of infralabials bordered by one long, narrow scale; 20 mid-body scale rows (the tail is partially regenerated). In life the body is purplish-brown with a blue-grey mid body transverse band. A second blue-grey transverse band just posterior to the head is evident in preservative. This species is otherwise only known from its type locality in An Khe District [= K Bang], Gia Lai Province (Darevsky 1992).

FAMILY SCINCIDAE

*Plestiodon quadrilineatus*. HA TINH PROVINCE, Huong Son District, Huong Son Reserve, Rao An Region, nr. top of Po-mu Mountain: AMNH R-147116, elevation 900–1200 m, 22 April 1998, T. Q. Nguyen. AMNH R-147117, nr. 18°22'N, 105°13'E, April 1998, Diana Silva. In Vietnam, this species is known from Lang Son Province (Man Son Mountains [= Mau Son Mountains]) and Quang Binh Province (Phong Nha), (Bourret 1939a; Darevsky and Orlov 2005; Taylor 1935; Ziegler et al. 2004). This species has been reported from Cao Bang (Nguyen Binh), Quang Ninh (Ba Mun), Son La (Moc Chau, Cao Pha), Thanh Hoa (Ben En), Ha Tinh, Nghe An (Pu Mat, Pu Huong), and Da Nang (Ba Na) Provinces, but without reference to a precise locality or voucher information (Ho et al. 2005; Hoang et al. 2005; Le 2000; Le and

Hoang 2001; Le and Nguyen 1999; Nguyen 2000; Nguyen 2005; Nguyen, Ho, and Nguyen 2005; Nguyen and Hoang 2000). In addition, this species is known from Thailand, China (Guangdong, Hong Kong, Guangxi, Sichuan, Hainan Provinces), and Cambodia (Smith 1935; Taylor 1935; Zhao and Adler 1993).

*Sphenomorphus cryptotis*. LAO CAI PROVINCE, Van Ban District, Nam Tha Commune, tributary to Khe Pan River: AMNH R-153698, 153699, 153700, 21°56'24"N, 104°24'7"E, elevation 360–400 m, 15 September 2004, R. H. Bain, K. V. Doan, and V. T. Trieu. AMNH R-153701, 21°56'39"N, 104°24'12"E, elevation 331 m, 17 September 2004, R. H. Bain, K. V. Doan, and T. V. Trieu. All specimens were collected sleeping on leaves or small branches overhanging a stream. This species is only known from Quang Ninh (Uong Bi Town, Yen Tu Mountain), and Nghe An (Quy Chau District) provinces in northern Vietnam (Darevsky et al. 2004).

*Sphenomorphus tridigitus*. QUANG NAM PROVINCE, Tra My District, Tra Don Commune, Mt. Ngoc Linh: IEBR 73, 15°11.688'N, 108°02.413'E, elevation 940 m, 21 March 1999, C.A. Johnson; IEBR 74, 15°10.762'N, 108°02.731'E, elevation 1470 m, P. R. Sweet. Both specimens were collected in pit fall traps, which were set near the ridges of the mountainous primary forest. Our specimen agrees with a recent redescription (Greer et al. 2006), including discrepancies with the type. As with the specimen of Greer et al. (2006), our specimens include a frontonasal with two widely separated prefrontals, and fusion of nasal and first infralabial scales. The loreal scale is not fused with the preocular, as Greer et al. (2006) believe it may be in the poorly preserved holotype. In Vietnam, this species is only known from Thua Thien-Hue Province (Bach Ma) from the original description (Bourret 1939c). It otherwise only known from Champasak Province, Laos (Teynie et al. 2004).

*Tropidophorus cocincinus*. THUA THIEN-HUE PROVINCE, Huong Thuy District: Binh Thanh Commune, tributary to Dau River: AMNH R-154623, nr. 16°17.995'N, 107°33.307'E, elevation 109 m, 8 September 2005, R. H. Bain, T. Q. Nguyen, C. K. Dang, and T. D. Nguyen; from a rocky shore of the stream. A Luoi District, Huong Nguyen Commune, A Lieng Stream: AMNH R-154624, 16°14'10"N 107°27'26"E, elevation ~ 160 m, 17 August 2005, R. H. Bain, T. Q. Nguyen, A. X. Tran; from a rocky portion of the stream edge in the water. A Luoi District, Huong Nguyen Commune: AMNH R-154625, 154626, nr. 16°14'26"N 107°27'11"E, elevation ~ 152 m, 19 August 2005, R. H. Bain, T. Q. Nguyen, and M. V. Tran; collected from a rocky portion of the stream edge in the water. In Vietnam this species is known from Kon Tum (Kon Tum) and Quang Binh (Phong Nha-Khe Bang) Provinces (Bourret 1939c; Darevsky and Orlov 2005; Smith 1935; Ziegler et al. 2004). This species has been reported from Thua-Thien-Hue (A Luoi) and Da Nang (Son Tra) Provinces, but without specific locality or voucher information (Dinh and Nguyen 2000; Ho 2002b; Nguyen, Ho, and Nguyen 2005). It is otherwise known from Laos (Xe Kong Province) and Thailand (Greer and Biswas 2004; Taylor 1963).

*Tropidophorus hainanus*. HA TINH PROVINCE, Huong Son District, Huong Son Reserve, Rao An region: AMNH R-147123, 18°20'47"N, 105°14'10"E, elevation 870 m, 9 May 1998, D.T. Pham. LAO CAI PROVINCE, Van Ban District, Nam Xay Commune: IEBR 1219, 21°58.731'N, 104°01.403'E, elevation 1550

m, 6 July 2002, Nguyen Quang Truong and Nguyen Van Hung; disturbed primary forest. This latter specimen was found on the ground near the steep bank of a small rocky stream within a hardwood forest. In Vietnam, this species has been reported from Tonkin (Tam Dao, Ngan Son) [= Tam Dao Mt., Vinh Phuc Province and Ngan Son District, Bac Kan Province], Nam Dinh (Giao Thuy District), and Cuc Phuong N.P. (Cuc Phuong borders Hoa Binh, Thanh Hoa, and Ninh Binh provinces, but the record from Bobrov [1993] does not stipulate from which part of the park the species was found) (Bourret, unpubl. 1937a, 1939b, 1939c; Bobrov 1993). Ziegler, Thanh et al. (2006) also list Bac Kan, Cao Bang, Dak Lak, Ha Tay, Hai Duong, Kon Tum, Lai Chau, Phu Tho, and Quang Ninh provinces of Vietnam as having records of this species, but they cite Nguyen (2005) and Orlov (2005), neither of which give precise locality or voucher information. Outside of Vietnam, this species is known from China (Hainan, Jiangxi, Guangxi provinces) (Smith 1935; Zhao and Adler 1993).

SUBORDER SERPENTES  
FAMILY COLUBRIDAE

*Dendrelaphis ngansonensis*. QUANG NAM PROVINCE, Tra My District, Tra Don Commune, AMNH R-148550, nr. 15°11.459'N, 108°2.523'E, elevation 1100 m, 1 April 1999, P. R. Sweet. In Vietnam this species is known from the following provinces Cao Bang (Ngan Son), Vinh Phuc (Tam Dao), Quang Binh (Phong Nha Khe-Bang), Ha Tinh ("Chuc A", Ke Anh-Ke Go, Chin Xai), Thua Thien-Hue (Bach Ma), Col des Nuages nr. Tourane = (Quang Nam Danang Province nr. Danang City), and in Cuc Phuong N.P. (this park borders Hoa Binh, Thanh Hoa, and Ninh Binh provinces, but the record from Ziegler and Vogel [1999] does not stipulate from which part of the park the species was found) (Bourret 1936; Orlov et al. 2000; Ziegler 2002; Ziegler et al. 2004). Nguyen, Ho, and Nguyen 2005 state that it is found in Quang Nam Province (Chu Lai), but without specific locality or voucher information. This species is also known from Xieng-Khouang (= Xieng Khoang) Province, Laos (Deuve 1970).

*Dinodon septentrionalis*. THUA THIEN-HUE PROVINCE, Nam Dong District, Thuong Lo Commune, Cha May River: AMNH R-154176, 16°7'40"N, 107°44'44"E, elevation ~ 220 m, 1 September 2005, R. H. Bain, T. Q. Nguyen, V. P. Nguyen, V. T. Nguyen, and V. M. Ngo; collected from among tree roots next to a cascade. In Vietnam, this species has been reported from the following provinces: Lai Chau, Lao Cai, Bac Kan, Cao Bang, Vinh Phuc, Nghe An, Quang Binh, Ha Tinh (Orlov et al. 2003). This wide-ranging species is also known from India, Myanmar, Thailand, China (Yunnan Province), Laos (Kiang Kuoang [= Xieng Khoang] Province), and Cambodia (Mondolkiri Province) (Bourret 1936; Orlov and Ryabov 2004; Smith 1943; Stuart et al. 2006).

*Euprepiophis mandarinus*. HA TINH PROVINCE, Huong Son District, Huong Son Reserve, Rao An region, top of Po-mu Mountain: IEBR 2302, 18°20'53"N, 105°14'38"E, elevation 1010–1080 m, 8 May 1998, T.X. Le. In Vietnam this species is known from Lao Cai (Mt. Fan Si Pan, Chapa [= Sa Pa], Ngo Toi), Lang Son (Mau Son), Vinh Phuc (Tam Dao), and Tuyen Quang (Na Hang District) Provinces (Angel and Bourret 1933; Bourret 1936; Le and Ziegler 2004; Orlov et al. 2000; Parker 1925). This species has been reported from Son La (Ta Sua, Xuan Nha), as well as Ha Tinh (Huong Son), but without a specific locality or voucher in-

formation (Nguyen 2000; Nguyen 2005; Nguyen, Ho, and Nguyen 2005). Elsewhere it is known from India, Myanmar, and several provinces across China (Smith 1943; Zhao and Adler 1993).

*Pareas carinatus*. QUANG NAM PROVINCE, Quang Nam, Tra My District, Tra Don Commune, Ngoc Linh Mountain: AMNH R-148551, elevation 980 m, 17 March 1999, T. Q. Nguyen. Smith (1943) stated that in Vietnam, this species was found "below 19°", otherwise it has only been specifically reported from Vinh Phuc (Tam Dao), Gia Lai (Son Lang), Quang Tri (Quang Tri), Quang Binh (Phong Nha), Tay Ninh (Tay Ninh), and Dong Nai (Trang Bom) Provinces (Campden-Main 1969; Orlov et al. 2000; Szyndlar and Nguyen 1996; Ziegler, Ohler et al. 2006). This species has also been reported from Lam Dong (Lac Duong), Dong Nai (Cat Tien), and Tay Ninh (Ba Den Mt.), but without reference to specific voucher or locality information (Ho and Nguyen 1982; Nguyen and Ho 2002; Pham et al. 2000). It is otherwise known from Myanmar, the Greater Sundas, Thailand, China, Laos, and Cambodia, (Manthey and Grossmann 1997; Pauwels et al. 2003; Saint Girons 1972; Smith 1943; Stuart and Emmett 2006; Zhao and Adler 1993).

*Pseudoxenodon macrops*. LAI CHAU PROVINCE, Mount Fan Si Pan: AMNH R-147147, elevation 2,020 m 19 August 1997, D. R. Frost and C. J. Raxworthy. HA TINH PROVINCE, Huong Son District, Huong Son Reserve, Rao An Region: AMNH R-147148, nr. 18°22'N, 105°13'E, 9 May 1998, via D. A. Kizirian. This species has previously been reported from Lao Cai (Ngoi Tio, Sa Pa), Vinh Phuc (Tam Dao), Da Nang (Ba Na), and Lam Dong (Fyan, Da Lat, Lang Bian) provinces (Campden-Main 1969; Orlov et al. 2000; Parker 1925). It is otherwise a widespread species throughout southeast Asia, from the eastern Himalayas to the Malay peninsula and east through Myanmar, Thailand, China and the Indochinese peninsula (Farkas and Fritz 1999; Smith 1943; Taylor 1965; Zhao and Adler 1993).

*Sibynophis collaris*. BAC KAN PROVINCE, Ba Be District, Ba Be National Park: AMNH R-147156, 7 August 1997, D. R. Frost and C. J. Raxworthy; beside a cascade. HA TINH PROVINCE, Ke Go Nature Reserve, Mon Stream: AMNH R-147157, 11 April 1998, T.Q. Nguyen and D. A. Kizirian. In Vietnam, this species is known from Lai Chau (Muong Nha), Nonh Bonh (Xom Bong [= Cuc Phuong]), Quang Binh (Phong Nha), Quang Tri (Xa Huc), Thua Thien-Hue (Hue), Gia Lai (Son Lang), Lam Dong (Bao Loc, Da Lat, Lang Bian), and Dong Nai (Bien Hoa) Provinces. (Campden-Main 1969; Szyndlar and Nguyen 1996; Ziegler et al. 2004). In Vietnam it has also been reported from Nghe An (Pu Mat, Pu Huong, Ky Son), Ha Tinh (Huong Son), Thua Thien-Hue (A Luoi), and Dong Nai (Cat Tien) Provinces, but without any voucher information (Ho 2002b; Le and Hoang 2001; Nguyen 2000; Nguyen and Ho 2002; Nguyen, Ho, and Nguyen 2005). This species is widespread across India, Nepal, Myanmar, Thailand, China, Laos, and Cambodia (Smith 1943).

*Sinonatrix aequifasciata*. LAO CAI PROVINCE, Van Ban District, Nam Tha Commune, tributary to Nam Tha River: AMNH R-153712, 153713, 21°55'23"N, 104°22'43"E, elevation ~ 640 m, 3 September 2004, R. H. Bain, T. Q. Nguyen, K. V. Doan, and A. C. Lu; from tree branches overhanging fast flowing water. Tributary to Khe Pan River: AMNH R-153714, 21°56'24"N, 104°24'7"E, elevation 360–400 m, 16 September 2004, R. H. Bain and K. V.

Doan. In Vietnam, this species has been reported from Ha Giang (Vi Xuyen District), Vinh Phuc (Tam Dao) and Nghe An (Ky Son) Provinces (Bain and Nguyen 2004b; Orlov et al. 2000; Vogel et al. 2004; Ziegler and Hoang 2005). This species has also been reported from Lao Cai (Van Ban), Cao Bang (Nguyen Binh), and Bac Giang (Luc Nam) provinces, Vietnam, but without reference to specific locality or voucher information (Ho et al. 2005; Nguyen et al. 2002; Nguyen, Nguyen, and Ho 2005). This species is otherwise known from China (Guangxi, Guangdong, Hong Kong, Hainan, Fujian, Guizhou, Hunan, Jiangxi, Sichuan, Zhejiang) (Zhao and Adler 1993; Zhou and Yu 2002).

*Sinonatrix percarinata*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune: IEBR 2312, nr. 16°04.636'N, 107°29.290'E, elevation ~ 680 m, 23 August 2005, R. H. Bain, T. Q. Nguyen, and V. S. Ho; on vegetation overhanging a stream, ~ 2 m above the surface. In Vietnam, this species is otherwise known from Lao Cai (Chapa [= Sa Pa], Thai Nien, Ngoi Toi), Ha Giang (Yen Minh District), Bac Kan (Ngan Son), Vinh Phuc (Tam Dao), Bac Giang (An Lac, Thanh Son), Quang Binh (Phong Nha Khe Bang N.P.), Ha Tinh (Chin Xia, Ke Go-See), and Kon Tum (Kon Tum, Kon Plong) provinces (Bain and Nguyen 2004b; Bourret 1937b, 1939; Campden-Main 1969; Orlov et al. 2000; Parker 1925; Szyndlar and Nguyen 1996; Ziegler 2002; Ziegler et al. 2004). This species has also been reported from Cao Bang (Nguyen Binh), Lang Son (Huu Lung), Son La (Muong Do, Xuan Nha), Hoa Binh (Da Bac), Bac Giang (Luc Nam), Thua Thien-Hue (A Luoi, Hung Thuy), and Dong Nai (Cat Tien) Provinces, but without reference to specific locality or voucher information (Dang et al. 1975; Ho 2002b; Ho et al. 2005; Nguyen 2005; Nguyen and Ho 2002; Nguyen et al. 2000; Nguyen et al. 2002; Nguyen, Ho, and Nguyen 2005). This species is otherwise known from India, Myanmar, Thailand, China (Hainan, Chekiang, Jiangxi, Fujian, Guangdong, Guangxi, Kweichow, Sichuan, and Hupeh Provinces), and Taiwan (Captain et al. 1998; Smith 1943; Zhao and Adler 1993; Zhou and Yu 2002).

#### FAMILY VIPERIDAE

*Protobothrops mucrosquamata*. LAO CAI PROVINCE, Van Ban District, Nam Tha Commune, forested stream above Nam Tha River: AMNH R-153720, 21°55'13"N, 104°22'15"E, elevation ~ 950 m, 5 September 2004, R. H. Bain, T. Q. Nguyen, K. V. Doan, V. T. Trieu, and A. L. Chu. In Vietnam, this species has been reported from Ha Giang (Du Gia Commune), Cao Bang, Bac Kan (Ngan Son), Thai Nguyen, Vinh Phuc (Tam Dao), Quang Ninh (Nam Son, Quan Lan), Ha Tay, Hai Duong, Ninh Binh, Nghe An, Ha Tinh (Ky Anh-Ke Go), Thua Thien-Hue (A Luoi), Gia Lai, and Kon Tum Provinces (Bourret 1936; Orlov et al. 2000; Szyndlar and Nguyen 1996; Ziegler 2002; Ziegler, Thanh et al. 2006). This widespread species is otherwise known from Bangladesh, India, Myanmar, and China (Leviton et al. 2003; Smith 1943; Zhao and Adler 1993).

*Viridovipera vogeli*. THUA THIEN-HUE PROVINCE, A Luoi District, A Roang Commune, stream at Ho Chi Minh Highway marker kilometer 398+700: AMNH R-154632, 16°4'28"N, 107°29'14"E, elevation ~ 653 m, 23 August 2005, R. H. Bain, T. Q. Nguyen, V. S. Ho, and V.T. Le; from flat rocky stream bank. HA TINH PROVINCE, Huong Son District, Rao An Region, nr. top of Po-mu Mountain: AMNH R-147162, elevation 900–1200

m, 22 April 1998, T. Q. Nguyen. In Vietnam, this species is known from Quang Binh, Gia Lai (An Khe = [K Bang], Krong Pa), Quang Nam, and Danang (Ba Na) Provinces (Malhotra and Thorpe 2004; Malhotra et al. 2004; Orlov et al. 2003). Nguyen, Ho, and Nguyen (2005) report this species from A Luoi, but without any specific locality or voucher specimen information. This species is otherwise known from Thailand, Laos (Champasak), and Cambodia (Mondolkiri Province, Cardamom Mountains) (David et al. 2001; Malhotra et al. 2004; Stuart et al. 2005).

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