CHITRA BURMANICA SENSU JARUTHANIN, 2002 (TESTUDINES: TRIONYCHIDAE): AN UNAVAILABLE NAME

William P. McCord¹, Olivier S. G. Pauwels², Roger Bour³, Frédéric Chérot⁴, John Iverson⁵, Peter C. H. Pritchard⁶, Kumthorn Thirakhupt⁷, Wachira Kitimasak⁸ and Thanakhom Bundhitwongrut⁹

¹East Fishkill Animal Hosp., 455 Rt. 82, Hopewell Jct., N.Y., 12533, U.S.A.
Email: chelodina@aol.com

²Department of Recent Vertebrates, Institut Royal des Sciences naturelles de Belgique,
Rue Vautier 29, 1000 Brussels, Belgium.

³Labaratoire des Reptiles et Amphibiens, Muséum national d'Histoire naturelle,
25 Rue Cuvier, 75005, Paris, France

⁴Labaratoire de Systématique et d'Ecologie animales, Université Libre de Bruxelles,
c. p. 160/13, Av. F. D. Roosevelt 50, 1050 Brussels, Belgium.

⁵Department of Biology, Earlham College, Richmond, Indiana, 47374, U.S.A.

⁶Chelonian Research Institute, 402 S. Central Ave., Oviedo, FL., 32765, U.S.A.

⁷Department of Biology, Faculty of Science, Chulalongkorn University, Bangkok 10330, Thailand.

⁸Kanchanaburi Inland Fisheries Research and Development Center, Tha Moung, Kanchanaburi 71110, Thailand.

⁹Crustacean Section, Natural History Museum, National Science Museum, Technopolis,
Klong 5, Klong Luang, Pathumthani 12120, Thailand.

ABSTRACT.— The name *Chitra burmanica*, as given to Myanmar *Chitra* by Kittipong Jaruthanin (2002: 32), is evaluated in light of the application of the fourth edition (1999) of the International Code of Zoological Nomenclature (ICZN). According to our analysis, the name *Chitra burmanica* is a *nomen nudum*, and thus unavailable.

KEYWORDS.— Chitra burmanica, Chitra vandijki, International Code of Zoological Nomenclature, nomen nudum.

INTRODUCTION

On 7 November, 2001, K. Jaruthanin and part of a group of over forty ichthyology colleagues visited a local market in Mae Sot, Tak Province, north-western Thailand, where he met with friends known to import fresh seafood and fish from Myanmar. Here, he observed several species of turtles, including softshell specimens referable to the genus Chitra Gray, 1844 (Jaruthanin, 2002: 32). A colour photo with the caption "Myanmar Chitra" (manlaï Phama) accompanies the article translated below as photo number 7 on p. 40, but no reference is made to this photo in the text. The Thai to English translation of the pertinent section of Jaruthanin (2002) is as follows [note we have bracketed our comments, and italicized the Thai vernacular names]:

".... Besides the fresh prawns, crabs and fish, there were live hardshell and softshell turtles which were all very interesting. We encountered tao dao Phama (BURMESE STAR TOR TOISE [sic]; Geoehelone [sic] platynota); tao nok young (PEACOCK TURTLE; Morenia ocelata [sic]); tao pulu (BIGHEAD TURTLE; Platysternon megacephalum vogeli) and also two species of taphab nam [softshell turtles]: taphab hab phama (BOX SOFT SHELL TURTLE; Lysemys [sic] scutata) and taphab manlaï Phama (BURMESE GIANT SOFT SHELL TURTLE; Chitra sp.). The taphab manlaï [= Chitra sp.] came from Myanmar; it is a taphab [= soft shell turtle] which has unique characters. It was not possible to directly identify this species with certainty because it seems to be between manlaï India (Chitra indica) and the manlaï species of Thailand and Malaysia (Chitra chitra). These intermediate characters can qualify *manlaï* Phama [Myanmar Chitra] as a new distinct species, for which the most convenient scientific name should be Chitra burmanica. But then

again, this might invalidate the differences separating the species *manlaï* India and *manlaï* Thai [i.e., *C. indica & C. chitra*] and would thus make them all only one and the same animal species known formerly as Chitra indica".

COMMENTS AND DISCUSSION

Our interest is to evaluate objectively the availability of the name *Chitra burmanica* as used by Jaruthanin (2002: 32), in light of the specific rules set down in the fourth edition of the Code (ICZN, 1999). Five critical sections of the Code are pertinent to our discussions:

- (1) Article 13.1 clearly states as a "requirement" that to be available a name published after 1930 must either "be accompanied by a description or definition that states in words characters that are purported to differentiate the taxon" (Article 13.1.1), or "be accompanied by a bibliographic reference to such a published statement" (Article 13.1.2). Jaruthanin (2002: 32) does not provide a description in words to distinguish Chitra burmanica from other taxa, nor did he include a specific bibliographic reference giving such a published description. We consider the term "intermediate" to be unacceptable as a "description or definition", because it gives no objective information about characters to identify C. burmanica.
- (2) Article 13.6.1 under "Exclusions" (from availability) states that "A name proposed after 1930 cannot be made available by the methods of "indication" listed in Article 12.2.7." Therefore, the illustration of *Chitra burmanica*, published in 2002, cannot be considered as an "indication" in the sense of Article 12.2.7, and thus does not make Jaruthanin's name available.
- (3) Article 15.1 concerning "Conditional proposal" states that "A new name or nomenclatural act proposed conditionally and published after 1960 is not thereby made available". In the case of Jaruthanin (2002: 32), the proposal of the name *Chitra burmanica* for Myanmar *Chitra* is essentially conditional. The author states that the Myanmar form appears "intermediate" with re-

gard to *Chitra indica* (Gray, 1831) and *Chitra chitra* "(=Nutphand)", 1986, and that all three forms may represent one species (thereby conditionally stating that the valid name of the Myanmar taxon could be *C. indica*). Thus, in Jaruthanin (2002) the species name *Chitra burmanica* would only be available on the condition that Myanmar *Chitra* are not really *C. indica*, which the author did not establish.

- (4) Article 16.4 states "Every new specific name published after 1999, must be accompanied in the original publication by the explicit [not implied] fixation of a holotype, or syntypes, for the nominal taxon" (Article 16.4.1). This requirement is also specified in Article 72.3: "A proposal of a new nominal species-group taxon after 1999 must include the fixation of a holotype or syntypes". Jaruthanin did not explicitly fix a holotype by original designation (according to Article 73.1.1). He further complicates the question of availability of his new name by mentioning an undefined plural number of specimens examined in the market, with no stated location for any of them, or even whether they were ever purchased, preserved and archived. It is not possible to know how many or what specimens he saw. Thus we cannot assume a holotype by monotypy (according to Article 73.1.2).
- (5) Article 73.2.1.1 under "Syntypes" states "When a nominal taxon is established after 1999, only those specimens expressly indicated by the author as those upon which the new taxon is based are syntypes.". Jaruthanin (2002) does not expressly indicate syntypes.

The clear result of interpreting the ICZN (1999), as given above, is to declare the name *Chitra burmanica* Jaruthanin, 2002 a *nomen nudum*, and thus unavailable. We consider *Chitra vandijki* McCord & Pritchard, 2003 to be the valid name for Myanmar *Chitra*.

ACKNOWLEDGEMENTS

We thank both Mrs. Chucheep Chimsunchart (Phetchaburi) and Karn Lekagul (Bangkok) for

translation from Thai to English, and Jonathan Murray (Bangkok) for bringing this matter to the attention of the authors.

LITERATURE CITED

GRAY, J. E. 1831. A synopsis of the species of the Class Reptilia. *In*: The Class Reptilia, arranged by the Baron Cuvier, with specific descriptions. E. Griffith & E. Pigeon (Eds). Vol. 9. pp: 1-110. Whittaker, Treacher & Co., London.
______. 1844. Catalogue of the tortoises, crocodiles and amphisbaenians, in the collection of the British Museum. British Museum, Lon-

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE. 1999. International Code of Zoological Nomenclature.

Fourth edition. International Trust for Zoological Nomenclature, London. 306 pp.

JARUTHANIN, K. 2002. [Go along Salaween. Visit a place with rare fish] Salaween: the dangerous river. Talui thin pla hayak. *Fish Zone*, Bangkok 3 (19): 27-40. [In Thai.]

McCORD, W. P. & P. C. H. PRITCHARD. 2003 ("2002"). A review of the softshell turtles of the genus *Chitra*, with the description of new taxa from Myanmar and Indonesia (Java). *Hamadryad* 27 (1): 11-56.

NUTAPHAND, W. 1986. [Manlai. The world's biggest softshell turtle]. *Thai Zool. Mag.* 1 (4): 64-70. [In Thai.]

Received: 28 April 2003. Accepted: 17 May 2003.