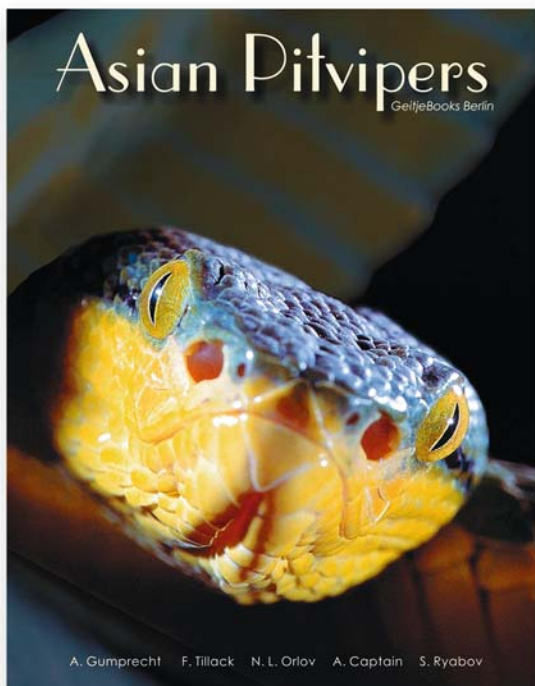


BOOK REVIEW



**Andreas Gumprecht, Frank Tillack,
Nikolai Orlov, Ashok Captain,
and Sergei Ryabov (2004),
ASIAN PITVIPERS,
GeitjeBooks Berlin, Berlin
368 pages, 1179 color photographs,
hardbound, 21.0 × 29.5 cm,
ISBN 3-937975-00-4 [in English]**

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Since the early 90', a strong renewal of interest in Asian pitvipers (Crotalidae) has led either to the description of new taxa (Vogel, 1991; Zhao and Chen, 1990; Isogawa et al., 1994; David et al., 2001, 2002; Ziegler et al., 2001; Orlov et al., 2004; Vogel et al., 2004), or to the investigation of the status of some species, such as *Trimeresurus venustus* (David et al., 2004; Malhotra and Thorpe, 2004a) or to a new classification of the *Trimeresurus* complex at the generic level (Malhotra and Thorpe, 2004b). So, the present book is published at a good time to present not only a summary of currently recognized taxa, but, even more importantly, to depict as

many species, subspecies and colour morphs as possible. I will say at once that this beautiful book succeeds very well in this second goal, in spite of several shortcomings which will be discussed below.

The authors offer us a superb volume. This book is nicely produced, with its appealing cover depicting an impressive picture of the head of a *Trimeresurus gramineus*, its large format, high quality glossy paper, pleasant layout and strong binding. The quality of most pictures is from very good to outstanding throughout, deserving a special commendation to authors. From an aesthetic point of view, this book is truly a masterpiece, but this is not surprising from such highly skilled photographers as Nikolai Orlov and Ashok Captain (for this latter author, see the photographs in Whitaker and Captain, 2004). The book is divided into four parts of greatly unequal

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length, as follows: (I) Introduction (pp. 3 – 16), containing a foreword by Wolfgang Wüster (p. 3), Contents (p. 5), Acknowledgments (pp. 6 – 7), an untitled section acting like Materials and Methods (pp. 7 – 10), a taxonomic update (p. 11), a list of English common names (p. 12), and tables of main morphological characters (pp. 13 – 16); (II) A checklist of Asian pitvipers (pp. 17 – 42). In this section, genera are listed in alphabetical order, as are species inside genera; subspecies are recognized; (III) The colour photographs of living specimens in the wild or in a natural surrounding, sometimes of preserved specimens, from one to eight, usually three or four per page, with pictures varying in size (pp. 43 – 346); genera and species are also listed in alphabetical order. This section contains pictures of species barely or even never previously depicted in colour photographs. This third main section is concluded by pictures of natural habitats (pp. 347 – 354); (IV) Literature (pp. 355 – 362), containing about 290 references, including some published as late as the first quarter of 2004. A systematic index and photographic credits conclude the book (pp. 363 – 368).

It is not so easy to review a book mostly consisting of (beautiful) pictures. One could say that such a book is surely flawless, as the pictures speak for themselves. Unfortunately, although the text of the introduction covers merely 40 pages, it includes a fair number of approximations, mistakes and unsupported statements. These pages are surely the most controversial in the book. Randomly, in the Glossary (p. 9): “Lectotype — a specimen that was designated to serve as a holotype by subsequent designation...” A lectotype is by no means to serve as a holotype! The authors confused “holotype” and name-bearing specimen, which, in the case of a lectotype, is selected among the syntypes. Anyway, the definitions of the holotype, paratype and neotype, are not especially clear neither. The concept of “Terra typica designata” is erroneous. Such a designation is invalid, unless it is supported by an indication (travel notes of the author of the taxon, and so on). Same problem for “Terra typica restricta”: a restriction has not the purpose of making the type locality “more precise” by itself, but either results from an indication, as explained above, or, more often, follows the designation of a lectotype or a neotype which has a precise locality. Such a restriction results from a nomenclatural act based on taxonomic evidence. Also erroneous, in a nomenclatural background, is the definition given for the word “valid.” In nomenclature, the validity of a “taxonomic unit” has nothing to do with any “common consensus used to refer to a certain taxon.” The validity, as well as the availability of a nomen is based on rules, of which the authors do not

seem to be really aware. Lastly, since Dowling (1951), a ventral scale has a more modern definition than “the scales (...) between throat and anal scale.”

Table of morphological characters relies mostly on the literature, with some unpublished scale counts made by the authors. I am fully aware that this book is not a morphological analysis of Asian pitvipers, but one may wonder why only a few species benefit from scale counts made by the authors, and, yet, without explanation regarding the method adopted to count these scales (see above for the ventrals). Scale counts given in the table include the numbers of ventrals, subcaudals, dorsal scale rows and supralabials. Numbers of ventrals and subcaudals are given separately for males and females, which is a good point. Some characters especially important in the *Trimeresurus* complex, namely the separation of the first supralabial with the nasal, and the contact (or not) of the second supralabial with the loreal pit, are not given. The numbers of supraoculars and of scales separating the internasals are also important characters. Unfortunately, for many species, the authors give several series of values. If their origin in the literature is credited, it is not clear if differences between these series depend on geographical variation. The values given for *Trimeresurus albolabris* are drawn only from Smith (1943) and Zhao et al. (1998). Why not Regenass and Kramer (1981)? I am also puzzled by the poor morphological information given for *Protobothrops flavoviridis*, one of the best described pitviper in the world. There is the same problem for *Trimeresurus insularis*. Here the authors cite rightly Regenass and Kramer (1981), but not Kopstein (1938) and How et al. (1996), who nevertheless published much more detailed pholidoses.

The checklist present genera in alphabetical order, and species in the same order within genera; subspecies are included. The original citation of the description is given in full, the type locality is indicated as found in the original description, followed often, but not always, with current geographical names; the type locality is sometimes cited in a definitely old-fashioned way, for example under *Trimeresurus mcgregori* (p. 35). The checklist does not include synonyms and the distribution is quite general at the country level, but comments on controversial taxa or recent synonyms are fortunately given, what may help readers unfamiliar with the herpetology of Southeastern Asia. A list of significant references, rather complete and systematic comments noting recent modifications or controversial taxonomic positions conclude species accounts. I must admit that the authors comply with the primary purpose of the checklist. In its introduction, the authors state that it lists “all taxa of Asian pitvipers (...) currently recognized as va-

lid.” It is definitely up to date, inasmuch as recent checklists were available as a basis (David and Ineich, 1999; McDiarmid et al., 1999; Orlov et al., 2002). This book was distributed in early August 2004 and seemingly completed in late spring 2004. As a rule, the checklist reproduces that of Orlov et al. (2002), with minor modifications. On p. 11, the new generic taxonomy of the *Trimeresurus* complex (Malhotra and Thorpe, 2004b) is given as a table. I regret that the authors just mentioned the species which were affected, and not a complete, updated list of taxa of the *Trimeresurus* complex.

There are some typographical errors in the checklist, for example (p. 17), under *Calloselasma rhodostoma* “Extract d’une lettre...” instead of “Extrait d’une lettre...,” or (p. 41) *Tropidolaemus wagleri* Boie, 1827, instead of (Boie, 1827), but the text is largely free of such mistakes. I would like to make some taxonomic or nomenclatural comments. The type locality of *Gloydus halys* (Pallas, 1776) is controversial. A neotype from Siberia was selected by Orlov and Barabanov (2000). This is really unfortunate, because Pallas’ travel notes make clear that the original type specimen was collected north of Astrakhan’, near the border between Russia and Kazakhstan (Bour, 1993). Under the account of *Gloydus monticola*, it is written that “Zhao (1995b) considered *Gloydus monticola* (...) to be a synonym of *Gloydus strauchi* (...) and this taxonomic arrangement was accepted by David and Ineich (1999).” This statement is not exact, as these latter authors recognized *G. monticola* as a subspecies of *Gloydus strauchi*. The authors recognize a specific level for *Trimeresurus flavomaculatus mcgregori* (p. 35). Even if this position really seems to be correct (David and Vogel, unpublished data), in the present book it is based on two publications of Gumprecht (2001, 2002). Unfortunately, no reason for this “new” position was explained or even mentioned in these “sources”... The occurrence of *Trimeresurus gumprechtii* in Northeast India (p. 33) has since been confirmed by David and Mathew (2005). The type material cited for *Trimeresurus puniceus* is erroneous. There are three syntypes, RMNH 1557 and RMNH 1558(1) – (2). I examined them, and, although no type specimen was mentioned in the brief original description of Kuhl (1824), the museum tags of these three specimens identify them as “cotypes.” The comments given under the account of *Trimeresurus yunnanensis* are both unclear and would need a more precise discussion. If it is true that some specimens previously identified as *T. yunnanensis* in the literature turned out to be referable to *Trimeresurus gumprechtii* or *Trimeresurus medoensis*, *T. yunnanensis* is indeed a distinct species according to my data. Lastly, the authors state (p. 42) that *Zhaoermia*

mangshanensis is a replacement name for *Ermia mangshanensis*. This is an approximation, as only the generic nomen *Ermia*, preoccupied, was replaced, not the specific nomen.

All in all, although table of morphological characters and the checklist may be regarded as a good summary of the Asian pitvipers, I can just regret the absence of synonyms, distribution maps, and especially of keys and brief diagnoses. It is also a pity that the authors relied only upon the literature in the citation of type specimens (see above for *T. puniceus*). I have the feeling that these two important parts were rather hastily compiled, perhaps to not make this book appear “only” as a picture book.

The section dedicated to colour plates, with a total of 1179 photographs, is undoubtedly the real strong point of this book. Most pictures of specimens (1134 photographs) are excellent and depict with a good resolution the scalation of the specimens, especially of the head, an important feature in pitvipers. Most species are covered by a large number of photographs (25 for *Trimeresurus puniceus*, 37 for *T. albolabris*, and even 65 for *Tropidolaemus wagleri*!). Many (if not all!) species have never previously been depicted so extensively. I really consider such a detailed pictorial account of various taxa to be of the greatest interest, as it allows the reader to have at hand an extensive sample of the variation in the coloration and pattern of the depicted species. Another major point is the citation of the precise locality of the depicted specimen. The section is concluded by 45 pictures of habitats.

However, if this section will remain as an important landmark on the knowledge of Asian pitvipers, this does not mean that it is flawless. Many pictures have appeared previously in the literature. Some are even printed for the fourth time! In the case of ten species, only preserved specimens are shown. This is understandable as far as *Tropidolaemus huttoni* is concerned, but is really hard to explain regarding *Trimeresurus yunnanensis*, which, for example, has been depicted alive in Ji (1999) and in Zhao and Huang (2003). *Protobothrops kaulbacki* was depicted alive in Leviton et al. (2003). A very minor criticism is the lack of photographic credits in the captions. The reader has to refer to an appendix to find the photographer. The pictures of habitats are in a separate section. This is a little bit inconvenient, but also understandable when a given habitat hosts more than one species (for example, p. 354: Fig. I).

I did not find misidentifications in this series of pictures, a point for which the authors can be commended. However, I would like to make some comments on the pages relative to the *Trimeresurus* complex. The authors

do not give the reason regarding their identification of the specimens shown on page 157 as *Trimeresurus* cf. *albolabris*. No relevant comment appears under the account of this species in the checklist. Again, no justification is given on pp. 236 – 238 about the identification of specimens as *Trimeresurus* cf. *macrops*. Do the authors regard them as a new taxon? In order to update this work, I would just mention the following points. *Protobothrops kaulbacki* has again been depicted alive in Rao and Zhao (2005). On page 221, the species identified as “*Trimeresurus* aff. *kanburiensis*” has been described as *Trimeresurus truongsongensis* by Orlov et al. (2004). Following Vogel et al. (2004), *Trimeresurus popeiorum* (pp. 256 – 258) is now monotypic; *Trimeresurus* cf. *popeiorum popeiorum* (pp. 259 – 265; why do the authors refer an unidentified or undescribed taxon to a precise subspecies?) is now *Trimeresurus fucatus* Vogel, David and Pauwels, 2004; *Trimeresurus* sp. 1 (pp. 267 – 268) has been described as *Trimeresurus nebularis* Vogel, David and Pauwels, 2004. On pages 271 – 276, *Trimeresurus barati* and *Trimeresurus sabahi* have both been raised to species level by Vogel et al. (2004). I take the opportunity of these comments to give the precise status of *Popeia inornata* Sanders, Malhotra, Gumprecht, Thorpe and Kuch, 2004. This taxon, whose description (Sanders et al., 2004) was published in late December 2004, is a synonym of *Trimeresurus nebularis* Vogel, David and Pauwels, 2004 for which the original description was both printed and put online on November 15, 2004.

These comments are by no means exhaustive. However, no one could say that this book is not worth buying it! As far as the pictorial section is concerned, I consider this photographic atlas to be a major addition to the literature of Asian snake fauna. I just regret that the secondary aspect of the book, namely the taxonomical section, falls short of its purpose, due to the somewhat neglected preparation of a true checklist and in the compilation of morphological variation. I admit that both were indeed a secondary purpose of the book. Nevertheless, I will by no means consider this book to be a “picture book” for amateurs. It is a must for all amateur and professional herpetologists, or even physicians, interested in the snakes of the region, and its photographs alone make it essential in any herpetological library. As I am involved in various works on Asian pitvipers, I would like to stress again the usefulness of this book in displaying intraspecific variation. I will undoubtedly use it as a reference book for the description of coloration and patterns of living specimens. The authors can be congratulated for the help they will bring to other researchers on

this subject. It is definitely the most complete pictorial presentation of Asian pitvipers to date.

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