



## Descriptions of two new species of *Cyrtodactylus* Gray 1827 (Squamata : Gekkonidae) endemic to southern Vietnam

NGO VAN TRI<sup>1</sup> & AARON M. BAUER<sup>2,3</sup>

<sup>1</sup>Department of Environmental Management and Technology, Institute of Tropical Biology, Vietnamese Academy of Science and Technology, 85 Tran Quoc Toan Street, District 3, Hochiminh City, Vietnam

<sup>2</sup>Department of Biology, Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085, USA

<sup>3</sup>Corresponding author. E-mail: aaron.bauer@villanova.edu

### Abstract

Two new species of the gekkonid lizard genus *Cyrtodactylus* Gray, 1827 are described on the basis of voucher specimens collected in isolated mountains separated from the Truong Son Mountain Range, southern Vietnam. Both species were collected from shallow caves, as have been many of the recently described *Cyrtodactylus* from across Southeast Asia. Both species, *C. takouensis* **sp. nov.** from Ta Kou Nature Reserve, Binh Thuan Province and *C. huynhi* **sp. nov.** from Chua Chan Mountain, Dong Nai Province, are characterized by a small number of enlarged femoral scales separated from the precloacal scales by a large diastema. They may be distinguished from one another and from all other congeners by differences in rows of tubercles and ventral scales, subcaudal scalation and dorsal color pattern. These new taxa bring the number of currently recognized *Cyrtodactylus* species in Vietnam to twelve.

**Key words:** *Cyrtodactylus*, Gekkonidae, new species, description, southern Vietnam, cave-dwelling

### Introduction

The genus *Cyrtodactylus* Gray, 1827 is one of the most speciose gekkonid lizard groups and is a dominant component of the gecko fauna of much of tropical Asia and parts of Oceania. As recently as 2002 only about 70 species were recognized in *Cyrtodactylus*, inclusive of *Geckoella*, which has sometimes been considered a subgenus (Rösler 2000, 2001; Das & Lim 2000; Kluge 2001). New species of *Cyrtodactylus* continue to be discovered throughout the range of the genus (e.g., Sri Lanka, Batuwita & Bahir 2005; New Guinea, Günther & Rösler 2003; Kraus & Allison 2006; Kraus 2007), but the greatest rate of discovery has been in Southeast Asia, where recent discoveries in Malaysia (Das & Lim 2000; Grismer 2005, 2006; Grismer & Leong 2005; Youmans & Grismer 2006), Laos (David *et al.* 2004), Myanmar (Bauer 2002, 2003), and Thailand (Bauer *et al.* 2002, 2003; Pauwels *et al.* 2004) have increased the number of recognized species to approximately 90.

One of the regions of greatest discovery of new *Cyrtodactylus* has been Vietnam. Until 1997, only three species had been recorded for the country, *C. condorensis*, *C. intermedius* (subsequently confirmed for Vietnam by Ngo & Grismer 2006), and *C. irregularis*. Since then *C. paradoxus*, *C. phongnhakebangensis*, *C. nigriocularis*, *C. badenensis*, *C. cryptus*, *C. caovansungi*, *C. chauquangensis*, and a new species from central Vietnam have been described (Darevsky & Szczerbak 1997; Ziegler *et al.* 2002; Nguyen *et al.* 2006; Heidrich *et al.* 2007; Orlov *et al.* 2007; Hoang *et al.* 2007; Rösler *et al.* 2008), bringing the national total to 11 species, nearly all of which appear to have highly restricted distributions. Many of the newly described forms are associated with karst outcrops or limestone cave formations, which act as isolated habitat “islands” and appear to have promoted speciation within *Cyrtodactylus*. In Vietnam, pairs of limestone restricted species occur in