



•生物编目•

中国两栖、爬行动物更新名录

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摘要: 本文在2015年发表的爬行动物名录及同年《中国两栖类信息系统》发布的两栖动物名录的基础上, 通过整理新发表的分类学研究及先前名录遗漏的部分早期文献, 更新了截至2019年底中国现生本土两栖、爬行动物物种名录。2015–2019年间, 中国两栖动物新记录1科, 新描述2属, 恢复1属有效性, 新记录1属, 新描述或恢复有效种74种, 新增国家纪录18种; 另6属、8种的有效性未得到近年研究证据支持(在此视为次定同物异名而未做收录, 后同)。同期, 中国爬行动物新恢复5科, 新描述1亚科, 新描述1属, 恢复3属有效性, 新记录3属, 新描述、恢复或提升有效种43个, 新增国家纪录10种; 另有5属、4种的有效性未得到近年研究证据支持, 并移除1属、4种在我国的分布纪录。此外, 通过整理2015年前文献, 爬行动物增补3属, 提升3亚种至科级地位, 增补国家新纪录3种, 另有3属、2种的有效性未得到近年研究证据支持, 同时移除1种在我国的分布纪录。综上, 截至2019年底, 我国共记录现生本土两栖动物3目13科62属515种(蚓螈目1科1属1种, 有尾目3科14属82种, 无尾目9科47属431种), 爬行动物3目35科135属511种(鳄形目1科1属1种, 龟鳖目6科18属34种, 有鳞目蛇亚目18科73属265种、蜥蜴亚目10科43属211种)。此外, 本文还对先前名录中部分爬行动物的中文名提出了修改建议, 建议恢复部分物种的惯用中文名。2015–2019年, 新物种及新纪录已知物种数量占现两栖、爬行动物物种总数的17.1%和10.2%。近年来, 我国发表的两栖、爬行动物新物种和已知物种的新纪录数量持续增加, 分类体系也在研究中不断完善, 建议今后及时地进行阶段性总结, 同时对存在的问题提出讨论, 以推动中国两栖、爬行动物分类学研究工作的进一步开展。

关键词: 两栖动物; 爬行动物; 生物多样性; 新物种; 名录; 分类学; 分类变动

The updated checklists of amphibians and reptiles of China

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Abstract: We updated the checklists of extant, native amphibians and reptiles of China based on the previously published checklist of reptiles in 2015, the online checklist of amphibians on the database AmphibiaChina, newly published data as of December 2019, and previously uncollected literature prior to 2015. In total, the amphibian fauna of China consists of 515 species in 62 genera, 13 families, and three orders (Anura: 431 species in 47 genera and nine families; Caudata: 82 species in 14 genera and four

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families; Gymnophiona: one species in one genus and one family), while the reptilian fauna of China consists of 511 species in 135 genera, 35 families, and three orders (Crocodylia: one species in one genus and one family; Testudines: 34 species in 18 genera and six families; Squamata 466 species in 116 genera and 28 families [Serpentes: 256 species in 73 genera, 18 families; Lacertilia: 211 species in 43 genera and 10 families]). Specifically, for amphibians between 2015 and 2019, one family was recorded from China for the first time, two new genera were described, a genus was resurrected, a genus was recorded from China for the first time, 74 new, valid species were either described or resurrected, 18 recognized species were recorded from China for the first time, and six genera and eight species were considered as junior synonyms. For reptiles between 2015 and 2019, five subfamilies were elevated to the full family status, one new subfamily and a new genus were described, three genera were resurrected, three recognized genera were recorded from China for the first time, 35 new species were described, two species were resurrected from synonyms, six subspecies were elevated to the full species status, 10 recognized species were recorded from China for the first time, four genera and four species were considered as junior synonyms, and distribution records of one genus and four recognized species were removed from China. Furthermore, by reviewing literature before 2015, we make additional changes on the previous reptile checklist, including adding new records of three genera, elevating three subspecies to full species status, adding new records of three recognized species, synonymizing three genera and two species as junior synonyms, and removing the distribution record of a single recognized species from China. Lastly, we revise the Chinese common names of some reptilian groups with recommendations to maintain the stability of the Chinese common names. The number of new species and new national records for amphibians and reptiles between 2015 and 2019 in China accounts for 17.1% and 10.2% of the total number of species in each group, respectively. Because new species are described at considerable speed and given the constant changes in the taxonomy of China's herpetofauna, it is crucial to update the checklists regularly and discuss the existing taxonomic problems, so that such information reflects the most current state of knowledge and are available for taxonomic researchers and conservation biologists alike.

Key words: amphibians; biodiversity; fauna checklist; reptiles; new species; taxonomy; taxonomic revisions

物种名录是进行生物多样性研究、保护、利用以及管理的重要基础资料。近年来研究技术手段不断提高,特别是随着整合分类学的发展,以形态学为主导构建的传统生物分类体系得以不断修订和完善;同时,新物种被不断发现并描述,而已知物种的分布和生态数据也得以不断更新。因此,依据最新分类学文献,整理并及时更新我国生物多样性编目,就显得尤为重要。

长期以来,两栖、爬行动物分类研究一直是我国分类学研究工作的重要组成部分。基于前期研究,我国学者出版了国家层面的两栖、爬行动物学系统性专著(如张孟闻等,1998;赵尔宓等,1998,1999;赵尔宓,2006;费梁等,2006,2012)和一系列省、市及区域性的著作。这些著作作为我国两栖、爬行动物多样性编目奠定了重要基础。基于研究发展的需要,费梁等(1990)对中国两栖动物名录进行了修订,随后赵尔宓等(2000)对中国两栖、爬行动物名录进行了更新。近期,蔡波等(2015)再次更新了我国爬行动物名录,而该研究结果被中国生物物种名录数据库所采纳并沿用(Ji et al, 2019)。自2015年以来,中国科

学院昆明动物研究所在线数据库的方式对中国两栖动物信息进行实时更新(<https://www.amphibiachina.org>),并在线发布年度性分类研究总结报告(王凯和蒋珂,2016;王凯和陈宏满,2017;王凯等,2018c,2019b)。

考虑到近期分类研究进展迅速,在上述工作的基础上,本文梳理并更新了截至2019年底我国现生本土两栖、爬行动物分类变更情况,更新了两大类群的物种名录。希望通过讨论现存分类学问题来推动我国两栖、爬行动物分类研究工作的进一步开展,并帮助生物多样性保护、管理部门及时掌握相关类群的物种名录及分类变更情况。

1 方法

以蔡波等(2015)和中国两栖类信息系统2015年名录(<http://www.amphibiachina.org/site/amplist/2015.xlsx>)为基础,结合最近5年的年度性分类研究汇总报告(王凯和蒋珂,2016;王凯和陈宏满,2017;王凯等,2018,2019a)和截至2019年底的分类学研究结果,整理形成中国现生本土两栖、爬行动物物种名录。

对于两栖动物,“中国两栖类信息系统”已经对主要分类体系(Frost, 2015; AmphibiaWeb, 2015)的异同进行了比较,本文不再赘述。

对于西藏南部边境地区的物种,由于缺乏系统调查研究,物种分类及分布存在不确定性,因此对除2015–2019年间描述、且模式产地在我国领土范围内的新物种进行收录外,对以往中文文献中未记录的其他已知物种,本文暂未进行增补收录。

物种学名依据国际动物物种命名法规相关规定(条款11.7, 11.8, 31.2, 50.3.2; International Commission on Zoological Nomenclature, 1999)和已发表的相关文献研究综合修订。新分类阶元的中文名以原文献提供信息为主;若原文献未给出中文名,则综合考虑学名拉丁文词源本意及分类系统稳定性进行拟定。对于近期发生分类变动的物种中文名,则结合以往中文文献内名称的使用习惯(赵尔宓等, 1993, 1999; 张孟闻等, 1998; 赵尔宓, 2004, 2006; 费梁等, 2006, 2012)、近期分类文献建议及拉丁文词源本意(Jaeger, 1965)提出修改建议。

2 结果

2.1 两栖动物分类变更

2.1.1 2015–2019年分类变更

2015–2019年间,我国两栖动物高级分类阶元新记录1科,即亚洲角蛙科(Ceratobatrachidae) (Yan F et al, 2016)。Yan F等(2016)依据多基因片段开展的分子系统学研究结果显示舌突蛙属(*Liurana*)嵌于亚洲角蛙科内部,因此将舌突蛙属由浮蛙科(Occidozygidae)转移至亚洲角蛙科,而亚洲角蛙科也代表了该科在我国的首次记录。该科在我国目前仅知1属,即舌突蛙属,分布于我国西藏南部。

新描述2属,即棱鼻树蛙属(*Nasutixalus*) (Jiang et al, 2016c)和张树蛙属(*Zhangixalus*) (Jiang DC et al, 2019)。Jiang等(2016c)依据线粒体片段的分子系统学结果,同时结合形态学差异,命名1新属,即棱鼻树蛙属。该属目前已知三种,其中两种分布于我国(西藏南部和云南西南部) (Yang & Chan, 2018)。Jiang DC等(2019)在线粒体分子系统学研究基础上,结合形态学和生物地理分布情况,将原树蛙属(*Rhacophorus*)拆分为3属,即狭义树蛙属(*Rhacophorus sensu stricto*) (主要分布于南亚、东南亚及我国西南地区)、恢复有效性的瘦树蛙属

(*Leptomantis*) (仅分布于东南亚)以及新命名的张树蛙属(主要分布于包括我国在内的东亚及中南半岛北部)。分类厘定后,我国原广义树蛙属(*Rhacophorus sensu lato*)物种中仅7种仍保留于狭义树蛙属,其余28种均改至张树蛙属,所涉及物种中文名保持不变(表1)。

恢复1属有效性,即琴蛙属(*Nidirana*) (Lyu et al, 2017)。结合线粒体基因片段的分子系统学、形态数据及求偶鸣叫特征, Lyu等(2017)揭示原广义拇棘蛙属(*Babina sensu lato*)分为两大支系,其形态与鸣声均存在明显差异,故恢复拇棘蛙属原次定同物异名琴蛙属的有效性,而我国原拇棘蛙属物种遂改隶琴蛙属。综合考虑费梁等(2012)提出的形态学结论与Lyu等(2017)一致,本文采纳该分类观点。属级变动所涉及的物种中文名保持不变(表1)。

新记录1属,即南亚陆蛙属(*Minervarya*) (Sanchez et al, 2018)。依据多基因片段为基础的分子系统学研究, Sanchez等(2018)建议对广义陆蛙属(*Fejervarya sensu lato*)进行拆分,限定狭义陆蛙属(*Fejervarya sensu stricto*)为其模式种*F. limnocharis*所代表支系,同时恢复*Minervarya* (中文名拟定为“南亚陆蛙属”)的有效性。依据该研究,清迈陆蛙(*Fejervarya Chiangmaiensis*)改隶至南亚陆蛙属。因此清迈陆蛙在我国的新纪录(Hui et al, 2019)也代表了南亚陆蛙属在我国的属级新纪录(表3)。

废除原掌突蟾属(*Leptolalax*)有效性,将其视为*Leptobranchella*的次定同物异名。依据多基因片段的分子系统学研究, Chen JM等(2018)构建了掌突蟾属及其近缘属的系统发育关系,结果显示掌突蟾属与*Leptobranchella*互不成单系;他们结合生物地理分布,对广义掌突蟾属进行了分类厘定。我国原*Leptolalax*属的所有物种遂划分至命名较早的*Leptobranchella*属,而该属级变动所涉及的属、种中文名均保持不变(表2)。

暂将无耳蟾属(*Atympanophrys*)、短腿蟾属(*Brachytarsophrys*)、拟角蟾属(*Ophryophryne*)、泛角蟾属(*Panophrys*)及异角蟾属(*Xenophrys*)视为角蟾属(*Megophrys*)的次定同物异名(表2)。基于多基因片段的分子系统学研究, Chen JM等(2017)研究表明广义角蟾属(*Megophrys sensu lato*)并非单系,拟角蟾属、短腿蟾属和婆罗蟾属(*Borneophrys*)均嵌入到角蟾属的内部;因此,上述作者提出两种分类建议:

表1 两栖、爬行动物属级分类变动1: 原属依旧有效, 而原属内仅部分物种的属级分类需要厘定。原属、种中文名指蔡波等(2015)、《中国两栖类信息系统》或相关文献曾使用的中文名。“-”表示该项未有变动, 与先前一致。其中突起树蛙(*Zhangixalus pachyproctus*)及山地龙蜥(*Diploderma swild*)在原始描述时已经考虑了本文接受的属级分类变动(Yu et al, 2019b; Wang K et al, 2019f), 故在此未列出。

Table 1 Generic-level taxonomic changes for amphibians and reptiles of China between 2015 and 2019, part 1: the either previous genus still remains valid, and only some species of that genus experience taxonomic changes at the generic level. The former Chinese common names refer to the ones used in AmphibiaChina (2015), in the previous reptilian checklist by Cai et al (2015), or in other related literature. “-” indicates no change occurs. For species of the referred genera, as the original descriptions of *Zhangixalus pachyproctus* and *Diploderma swild* already adopted the taxonomic changes we discuss here (Yu et al, 2019b; Wang K et al, 2019f), hence they were not included in the table.

原属学名 Previous genus name	原属中文名 Previous Chinese mon name	原种中文名 Previous Chinese mon name	原种学名 Previous species name	原种学名 Previous Chinese mon name	原命名人引用格式 Previous taxonomic authority	现属学名 Current genus name	现属中文名 Revised Chinese mon name	现种学名 Current species name	现种中文名 Revised Chinese common name	现命名人引用格式 Current taxonomic authority	参考文献 Reference
两栖动物 Amphibians											
<i>Babina</i>	拇棘蛙属	弹琴蛙	<i>Babina adenopleura</i>	琴蛙属	(Boulenger, 1909)	<i>Nidirana</i>	琴蛙属	<i>Nidirana adenopleura</i>	-	-	Lyu et al, 2017
		仙琴蛙	<i>Babina daunchina</i>		(Chang, 1933)			<i>Nidirana daunchina</i>	-	-	
		海南琴蛙	<i>Babina hainanensis</i>		(Fei, Ye, and Jiang, 2007)			<i>Nidirana hainanensis</i>	-	-	
		林琴蛙	<i>Babina lini</i>		(Chou, 1999)			<i>Nidirana lini</i>	-	-	
		琉球琴蛙	<i>Babina okinavana</i>		(Boettger, 1895)			<i>Nidirana okinavana</i>	-	-	
		滇蛙	<i>Babina pleuraden</i>		(Boulenger, 1904)			<i>Nidirana pleuraden</i>	-	-	
<i>Fejervarya</i>	陆蛙属	-	<i>Fejervarya chiangmaiensis</i>	南亚陆蛙属	Suwannapoom, Yuan, Poyarkov, Yan, Kamtaeja, Murphy, and Che, 2016	<i>Minervarya</i>	南亚陆蛙属	<i>Minervarya chiangmaiensis</i>	清迈陆蛙	(Suwannapoom, Yuan, Poyarkov, Yan, Kamtaeja, Murphy, and Che, 2016)	Sanchez et al, 2018
<i>Odorrana</i>	臭蛙属	-	<i>Odorrana arunachalensis</i>	倭蛙属	Saikia, Sinha, and Kharkongor, 2017	<i>Nanorana</i>	倭蛙属	<i>Nanorana arunachalensis</i>	藏南棘蛙	(Saikia, Sinha, and Kharkongor, 2017)	Qi et al, 2019a; 王凯等, 2018
<i>Rhacophorus</i>	树蛙属	诸罗树蛙	<i>Rhacophorus arvalis</i>	张树蛙属	Lue, Lai, and Chen, 1995	<i>Zhangixalus</i>	张树蛙属	<i>Zhangixalus arvalis</i>	-	(Lue, Lai, and Chen, 1995)	Jiang DC et al, 2019
		橙腹树蛙	<i>Rhacophorus aurantiventris</i>		Lue, Lai, and Chen, 1994			<i>Zhangixalus aurantiventris</i>	-	(Lue, Lai, and Chen, 1994)	
		缅甸树蛙	<i>Rhacophorus burmanus</i>		(Andersson, 1939)			<i>Zhangixalus burmanus</i>	-	-	
		经甫树蛙	<i>Rhacophorus chenfui</i>		Liu, 1945			<i>Zhangixalus chenfui</i>	-	(Liu, 1945)	
		大树蛙	<i>Rhacophorus dennyssi</i>		Blanford, 1881			<i>Zhangixalus dennyssi</i>	-	(Blanford, 1881)	
		绿背树蛙	<i>Rhacophorus dorsovitridis</i>		Bourret, 1937			<i>Zhangixalus dorsovitridis</i>	-	(Bourret, 1937)	
	蓝面树蛙	<i>Rhacophorus duboisi</i>		Ohler, Marquis, Swan, and Grosjean, 2000			<i>Zhangixalus duboisi</i>	-	(Ohler, Marquis, Swan, and Grosjean, 2000)		

<i>Rhacophorus dugritei</i>	宝兴树蛙	(David, 1871)	<i>Zhangixalus dugritei</i>	—	—
<i>Rhacophorus feae</i>	棕褶树蛙	Boulenger, 1893	<i>Zhangixalus feae</i>	—	(Boulenger, 1893)
<i>Rhacophorus hongchibaensis</i>	巫溪树蛙	Li, Liu, Chen, Wu, Murphy, Zhao, Wang, and Zhang, 2012	<i>Zhangixalus hongchibaensis</i>	—	(Li, Liu, Chen, Wu, Murphy, Zhao, Wang, and Zhang, 2012)
<i>Rhacophorus hui</i>	胡氏树蛙	Liu, 1945	<i>Zhangixalus hui</i>	—	(Liu, 1945)
<i>Rhacophorus hungfuensis</i>	洪佛树蛙	Liu and Hu, 1961	<i>Zhangixalus hungfuensis</i>	—	(Liu and Hu, 1961)
<i>Rhacophorus leucofasciatus</i>	白线树蛙	Liu and Hu, 1962	<i>Zhangixalus leucofasciatus</i>	—	(Liu and Hu, 1962)
<i>Rhacophorus lishuiensis</i>	丽水树蛙	Liu, Wang, and Jiang, 2017	<i>Zhangixalus lishuiensis</i>	—	(Liu, Wang, and Jiang, 2017)
<i>Rhacophorus minimus</i>	侏树蛙	Rao, Wilkinson, and Liu, 2006	<i>Zhangixalus minimus</i>	—	(Rao, Wilkinson, and Liu, 2006)
<i>Rhacophorus moltrechti</i>	台湾树蛙	Boulenger, 1908	<i>Zhangixalus moltrechti</i>	—	(Boulenger, 1908)
<i>Rhacophorus nigropunctatus</i>	黑点树蛙	Liu, Hu, and Yang, 1962	<i>Zhangixalus nigropunctatus</i>	—	(Liu, Hu, and Yang, 1962)
<i>Rhacophorus ometmontis</i>	峨眉树蛙	(Stejneger, 1924)	<i>Zhangixalus ometmontis</i>	—	—
<i>Rhacophorus pinglongensis</i>	平龙树蛙	Mo, Chen, Liao, and Zhou, 2016	<i>Zhangixalus pinglongensis</i>	—	(Mo, Chen, Liao, and Zhou, 2016)
<i>Rhacophorus prasinatus</i>	翡翠树蛙	Mou, Risch, and Lue, 1983	<i>Zhangixalus prasinatus</i>	—	(Mou, Risch, and Lue, 1983)
<i>Rhacophorus puerensis</i>	普洱树蛙	(He, 1999)	<i>Zhangixalus puerensis</i>	—	—
<i>Rhacophorus smaragdinus</i>	白颌大树蛙	(Blyth, 1852)	<i>Zhangixalus smaragdinus</i>	—	—
<i>Rhacophorus taipeiensis</i>	台北树蛙	Liang and Wang, 1978	<i>Zhangixalus taipeiensis</i>	—	(Liang and Wang, 1978)
<i>Rhacophorus wui</i>	利川树蛙	Li, Liu, Chen, Wu, Murphy, Zhao, Wang, and Zhang, 2012	<i>Zhangixalus wui</i>	—	(Li, Liu, Chen, Wu, Murphy, Zhao, Wang, and Zhang, 2012)
<i>Rhacophorus yaoshanensis</i>	瑶山树蛙	Liu and Hu, 1962	<i>Zhangixalus yaoshanensis</i>	—	(Liu and Hu, 1962)
<i>Rhacophorus yinggelingensis</i>	鹦哥岭树蛙	Chou, Lau, and Chan, 2007	<i>Zhangixalus yinggelingensis</i>	—	(Chou, Lau, and Chan, 2007)
<i>Rhacophorus zhokuiyai</i>	安徽树蛙	Pan, Zhang, and Zhang, 2017	<i>Zhangixalus zhokuiyai</i>	—	(Pan, Zhang, and Zhang, 2017)

表 1 (续) Table 1 (continued)

原属学名 Previous genus name	原属中文名 Previous Ch- inese com- mon name	原种中文名 Previous Ch- inese com- mon name	原命名人引用格式 Previous taxonomic authority	现属学名 Current genus name	现属中文名 Revised Ch- inese com- mon name	现科学名 Current species name	现种中文名 Revised Chinese common name	现命名人引用格式 Current taxonomic authority	参考文献 Reference
<i>Japalura</i>	攀蜥属	巴塘攀蜥	Li, Deng, Wu, and Wang, 2001	<i>Diploderma</i>	龙蜥属	<i>Diploderma batangense</i>	巴塘龙蜥	(Li, Deng, Wu, and Wang, 2001)	Wang K et al, 2019a
		短肢攀蜥	Gressitt, 1936			<i>Diploderma brevipes</i>	短肢龙蜥	(Gressitt, 1936)	
		短尾攀蜥	Manthey, Denzer, Hou, and Wang, 2012			<i>Diploderma brevicauda</i>	短尾龙蜥	(Manthey, Denzer, Hou, and Wang, 2012)	
		侏攀蜥	Wang, Ren, Jiang, Zou, Wu, Che, and Siler, 2019			<i>Diploderma drukdaypo</i>	侏龙蜥	(Wang, Ren, Jiang, Zou, Wu, Che, and Siler, 2019)	
		裸耳攀蜥	(Boulenger, 1906)			<i>Diploderma dymondi</i>	裸耳龙蜥	–	
		草绿攀蜥	Barbour and Dunn, 1919			<i>Diploderma flaviceps</i>	草绿龙蜥	(Barbour and Dunn, 1919)	
		宜宾攀蜥	Stejneger, 1924			<i>Diploderma grahami</i>	宜宾龙蜥	(Stejneger, 1924)	
		宜兰攀蜥	Ota, Chen, and Shang, 1998			<i>Diploderma luei</i>	宜兰龙蜥	(Ota, Chen, and Shang, 1998)	
		溪头攀蜥	Ota, 1989			<i>Diploderma makii</i>	溪头龙蜥	(Ota, 1989)	
		米仓山攀蜥	Song, 1987			<i>Diploderma micangshanensis</i>	米仓山龙蜥	(Song, 1987)	
		琉球攀蜥	(Hallowell, 1860)			<i>Diploderma polygonatum</i>	琉球龙蜥	Hallowell, 1861	
		丽纹攀蜥	Barbour and Dunn, 1919			<i>Diploderma splendidum</i>	丽纹龙蜥	(Barbour and Dunn, 1919)	
		台湾攀蜥	Günther, 1864)			<i>Diploderma swinhonis</i>	台湾龙蜥	(Günther, 1864)	
		昆明攀蜥	(Boulenger, 1918)			<i>Diploderma varcoae</i>	昆明龙蜥	–	
		帆背攀蜥	Wang, Jiang, Pan, Hou, Siler, and Che, 2015			<i>Diploderma vela</i>	帆背龙蜥	(Wang, Jiang, Pan, Hou, Siler, and Che, 2015)	

<i>Japalura yulongensis</i>	玉龙攀蜥	Manthey, Denzer, Hou, and Wang, 2012	<i>Diploderma yulongense</i>	玉龙龙蜥	(Manthey, Denzer, Hou, and Wang, 2012)
<i>Japalura yunnanensis</i>	云南攀蜥	Anderson, 1878	<i>Diploderma yunnanense</i>	云南龙蜥	(Anderson, 1878)
<i>Japalura zhaohermii</i>	汶川攀蜥	Gao and Hou, 2002	<i>Diploderma zhaohermii</i>	汶川龙蜥	(Gao and Hou, 2002)
<i>Japalura bapoensis</i>	独龙江攀蜥	(Yand and Su, 1978)	<i>Pseudocalotes kingdonwardi bapoensis</i>	西藏拟树蜥巴坡亚种	—
<i>Opisithotropis praeaxillaris</i>	老挝后棱蛇	(Angel, 1928)	<i>Paratapirophis praeaxillaris</i>	老挝副后棱蛇	Angel, 1929
<i>Opisithotropis balteata</i>	横纹后棱蛇	(Cope, 1895)	<i>Trimerodytes balteatus</i>	环游蛇属	Cope, 1895
<i>Cyrtopodion elongatum</i>	长弯脚虎	(Blanford, 1875)	<i>Tenuidactylus elongatus</i>	细趾虎属	—
<i>Cyrtopodion dadunense</i>	大敦弯脚虎	Shi and Zhao, 2011	<i>Tenuidactylus dadunensis</i>	大敦细趾虎	(Shi and Zhao, 2011)
<i>Rhabdops bicolor</i>	黄腹杆蛇属	(Blyth, 1854)	<i>Smithophis bicolor</i>	杆蛇属	—
					Giri et al, 2019b

即将广义角蟾属进行多属拆分, 或整体合并为单属。在多属拆分原则下, Chen JM等(2017)建议承认短腿蟾属和拟角蟾属的有效性, 同时将原广义的角蟾属划分为3个独立属, 即恢复分布于中国南方和中南半岛的无耳蟾属和异角蟾属, 将狭义角蟾属 (*Megophrys sensu stricto*) 限定于巽他古陆(Sundaland), 而婆罗蟾属则是狭义角蟾属的次定同物异名。随后, Mahony等(2017)依据不同的基因片段数据, 也构建了广义角蟾属的系统发育关系, 其结果同样支持广义角蟾属并非单系; 结合形态数据, Mahony等(2017)认为广义角蟾属中多个演化支系间没有足以支持属级分类的形态区别, 属于近期分化的类群, 因此建议单属的划分观点, 即将拟角蟾属、无耳蟾属、短腿蟾属、泛角蟾属和异角蟾属均降为亚属、并视为角蟾属的次定同物异名。考虑到目前在形态上较难对部分支系作出稳定区分, 综合单系性和分类可操作性原则, 本文暂采纳单属划分观点, 将分布于我国的短腿蟾属、无耳蟾属、拟角蟾属、异角蟾属及泛角蟾属降为亚属并视为角蟾属的次定同物异名, 但所有涉及的物种中文名均保持不变(见下文)。而由于属级分类变动, 原突肛拟角蟾 (*Ophryophryne pachyproctus*) 和凸肛角蟾 (*Megophrys pachyproctus*) 成为异物同名; 因此Mahony等(2017)遵从国际动物物种命名法第52.3, 57.3及60.3条关于优先权的规定, 将命名时间较晚的突肛拟角蟾的学名变更为 *M. koui*, 物种命名人信息也因此作出相应调整, 本文采纳其观点。

暂不接受近期关于水蛙属 (*Hylarana*) 的高阶元分类变动。Oliver等(2015)依据多基因片段的分子系统学研究构建了广义水蛙属的系统发育关系, 建议将其拆分为9个独立属。考虑到部分属的单系性并未得到较好解决, 为避免频繁不必要的变更, 本文在此暂保留原广义水蛙属单属的分类划分。

在种级分类阶元上, 共新发现描述或恢复两栖动物74种, 并新增18个已知种在我国的分布纪录(表4, 5)。新物种中, 有9种在本文中所采纳的属级分类地位与其原始描述不同(表1, 4); 其中, 除由于上述接受的属级分类变动而产生的变动外, 另将 *Odorranarunachalensis* 移至倭蛙属 (*Nanorana*) (Qi et al, 2019a), 即 *Nanorana arunachalensis*, 中文名拟定为“藏南棘蛙”。

否定8种两栖动物的有效性。其中, 综合考虑分

表2 两栖、爬行动物属级分类变动2: 原属已无效, 整属均被厘定, 或原属内物种发生多项变动, 而我国物种仅涉及其中部分变动。原属、种中文名指蔡波等(2015)、《中国两栖类信息系统》或相关文献曾使用的中文名。“-”表示该项未有变动。其中, 五皇山掌突蟾(*Leptobrachella wuhuangmontis*)和云开掌突蟾(*L. yunkaiensis*)在原始描述时已经考虑了本文接受的属级分类变动(Wang J et al, 2018a), 故在此未列出。

Table 2 Generic-level taxonomic changes for amphibians and reptiles of China between 2015 and 2019, part 2: the previous genus became junior synonym, and changes for species from China represent all changes at the generic level for the genus; or the members of the previous genus became multiple genera, and the species from China only represent some of the revised genera. The former Chinese common names refer to the ones used in AmphibiaChina (2015), in the previous reptilian checklist by Cai et al (2015), and in other related literature. “-” indicates no change occurs. For species of the referred genera, as *Leptobrachella wuhuangmontis* and *L. yunkaiensis* already adopted the taxonomic changes we discuss here (Wang J et al, 2018a), hence they were not included in the table.

原属学名 Previous genus name	原属中文名 Previous Chinese name	原种学名 Previous species name	原种中文名 Previous Chinese name	原命名人引用格式 Previous taxonomic authority	现属学名 Current genus name	现属中文名 Revised Chinese name	现种学名 Current species name	现种中文名 Revised Chinese name	现命名人引用格式 Current taxonomic authority	参考文献 Reference
掌突蟾属 <i>Leptolalax</i>	掌突蟾属 <i>Leptolalax</i>	<i>Leptolalax alpina</i>	高山掌突蟾	Fei, Ye, and Li, 1990	<i>Leptobrachella</i>	-	<i>Leptobrachella alpina</i>	-	(Fei, Ye, and Li, 1990)	Chen JM et al, 2018
		<i>Leptolalax laui</i>	刘氏掌突蟾	Sung, Yang, and Wang, 2014	<i>Leptobrachella</i>	-	<i>Leptobrachella laui</i>	-	(Sung, Yang, and Wang, 2014)	
		<i>Leptolalax liui</i>	福建掌突蟾	Fei and Ye, 1990	<i>Leptobrachella</i>	-	<i>Leptobrachella liui</i>	-	(Fei and Ye, 1990)	
		<i>Leptolalax mangshanensis</i>	莽山掌突蟾	Hou, Zhang, Hu, Li, Shi, Chen, Mo, and Wang, 2018	<i>Leptobrachella</i>	-	<i>Leptobrachella mangshanensis</i>	-	(Hou, Zhang, Hu, Li, Shi, Chen, Mo, and Wang, 2018)	
		<i>Leptolalax maershanensis</i>	猫儿山掌突蟾	Yuan, Sun, Chen, Rowley, and Che, 2017	<i>Leptobrachella</i>	-	<i>Leptobrachella maershanensis</i>	-	(Yuan, Sun, Chen, Rowley, and Che, 2017)	
		<i>Leptolalax oshanensis</i>	峨山掌突蟾	Liu, 1950	<i>Leptobrachella</i>	-	<i>Leptobrachella oshanensis</i>	-	(Liu, 1950)	
		<i>Leptolalax pelodytoides</i>	鳖掌突蟾	Boulenger, 1893	<i>Leptobrachella</i>	-	<i>Leptobrachella pelodytoides</i>	-	(Boulenger, 1893)	
		<i>Leptolalax purpura</i>	紫棕掌突蟾	Yang, Zeng, and Wang, 2018	<i>Leptobrachella</i>	-	<i>Leptobrachella purpura</i>	-	(Yang, Zeng, and Wang, 2018)	
		<i>Leptolalax sungi</i>	三岛掌突蟾	Lathrop, Murphy, Orlov, and Ho, 1998	<i>Leptobrachella</i>	-	<i>Leptobrachella sungi</i>	-	(Lathrop, Murphy, Orlov, and Ho, 1998)	
		<i>Leptolalax tengchongensis</i>	腾冲掌突蟾	Yang, Wang, Chen, and Rao, 2016	<i>Leptobrachella</i>	-	<i>Leptobrachella tengchongensis</i>	-	(Yang, Wang, Chen, and Rao, 2016)	
		<i>Leptolalax ventripunctata</i>	腹斑掌突蟾	Fei, Ye, and Li, 1990	<i>Leptobrachella</i>	-	<i>Leptobrachella ventripunctata</i>	-	(Fei, Ye, and Li, 1990)	
		<i>Leptolalax yingjiangensis</i>	盈江掌突蟾	Yang, Zeng, and Wang, 2018	<i>Leptobrachella</i>	-	<i>Leptobrachella yingjiangensis</i>	-	(Yang, Zeng, and Wang, 2018)	
无耳蟾属 <i>Atympanophrys</i>	无耳蟾属 <i>Atympanophrys</i>	<i>Atympanophrys gigantea</i>	大花角蟾	Liu, Hu, and Yang, 1960	<i>Megophrys</i>	角蟾属	<i>Megophrys gigantea</i>	-	(Liu, Hu, and Yang, 1960)	Chen JM et al, 2017;
		<i>Atympanophrys nankiangensis</i>	南江角蟾	Liu and Hu, 1966	<i>Megophrys</i>	-	<i>Megophrys nankiangensis</i>	-	(Liu and Hu, 1966)	Maltony et al, 2017
		<i>Atympanophrys shapingensis</i>	沙坪角蟾	Liu, 1950	<i>Megophrys</i>	-	<i>Megophrys shapingensis</i>	-	(Liu, 1950)	
		<i>Atympanophrys wawuensis</i>	瓦屋角蟾	Fei, Jiang, and Zheng, 2001	<i>Megophrys</i>	-	<i>Megophrys wawuensis</i>	-	(Fei, Jiang, and Zheng, 2001)	

<i>Brachytarsophrys</i>	短腿蟾属	<i>Brachytarsophrys</i>	宽头短腿蟾	(Boulenger, 1889)	<i>Megophrys</i>	角蟾属	<i>Megophrys</i>	–	(Boulenger, 1889)	Chen JM et al, 2017;
		<i>carinense</i>					<i>carinense</i>	–		al, 2017;
		<i>Brachytarsophrys chuannanensis</i>	川南短腿蟾	Fei, Ye, and Huang, 2001			<i>Megophrys chuannanensis</i>	–	(Fei, Ye, and Huang, 2001)	Mahony et al, 2017
		<i>Brachytarsophrys feae</i>	费氏短腿蟾	(Boulenger, 1887)			<i>Megophrys feae</i>	–	Boulenger, 1887	
		<i>Brachytarsophrys popei</i>	珀普短腿蟾	Zhao, Yang, Chen, Chen, and Wang, 2014			<i>Megophrys popei</i>	–	(Zhao, Yang, Chen, Chen, and Wang, 2014)	
<i>Ophryophryne</i>	拟角蟾属	<i>Ophryophryne pachyproctus</i>	突肛拟角蟾	Kou, 1985			<i>Megophrys koui</i>	–	Mahony, Foley, Biju, and Teeling, 2017	
		<i>Ophryophryne microstoma</i>	小口拟角蟾	Boulenger, 1903			<i>Megophrys microstoma</i>	–	(Boulenger, 1903)	
爬行动物 Reptiles										
<i>Oriocalotes</i>	异鳞蜥属	<i>Oriocalotes paulus</i>	异鳞蜥	Smith, 1935	<i>Calotes</i>	树蜥属	<i>Calotes paulus</i>	–	(Smith, 1935)	Giri et al, 2019a
<i>Orthriophis</i>	晨蛇属	<i>Orthriophis taeniurus</i>	黑眉晨蛇	(Cope, 1861)	<i>Elaphe</i>	锦蛇属	<i>Elaphe taeniura</i>	黑眉锦蛇	–	Chen X et al, 2017
		<i>Orthriophis cantoris</i>	坎氏晨蛇	(Boulenger, 1894)			<i>Elaphe cantoris</i>	坎氏锦蛇	–	
		<i>Orthriophis hodgsonii</i>	南峰晨蛇	(Günther, 1860)			<i>Elaphe hodgsonii</i>	南峰锦蛇	–	
		<i>Orthriophis moellendorffi</i>	百花晨蛇	(Boettger, 1886)			<i>Elaphe moellendorffi</i>	百花锦蛇	–	
<i>Pararhabdophis</i>	异纹蛇属	<i>Pararhabdophis chapaensis</i>	–	Bourret, 1934	<i>Hebius</i>	东亚腹链蛇属	<i>Hebius chapaensis</i>	沙坝腹链蛇	(Bourret, 1934)	Ren et al, 2018
<i>Rhynchophis</i>	尖喙蛇属	<i>Rhynchophis boulengeri</i>	尖喙蛇	Mocquard, 1897	<i>Gonyosoma</i>	树栖锦蛇属	<i>Gonyosoma boulengeri</i>	–	(Mocquard, 1897)	Chen et al, 2014
<i>Rhadimophis</i>	绿蛇属	<i>Rhadimophis frenatus</i>	灰腹绿蛇	(Gray, 1853)			<i>Gonyosoma frenatum</i>	灰腹绿锦蛇	–	
		<i>Rhadimophis pasinus</i>	绿蛇	(Blyth, 1854)			<i>Gonyosoma prasinum</i>	绿锦蛇	–	
<i>Macropisthodon</i>	颈棱蛇属	<i>Macropisthodon rudis</i>	颈棱蛇	Boulenger, 1906	<i>Pseudoagkistrodon</i>	–	<i>Pseudoagkistrodon rudis</i>	–	(Boulenger, 1907)	Takeuchi et al, 2018
<i>Sinonatrix</i>	华游蛇属	<i>Sinonatrix annularis</i>	赤链华游蛇	(Hallowell, 1856)	<i>Trimerodytes</i>	环游蛇属	<i>Trimerodytes annularis</i>	–	–	Ren et al, 2019
		<i>Sinonatrix aequifasciata</i>	环纹华游蛇	(Barbour, 1908)			<i>Trimerodytes aequifasciatus</i>	–	–	
		<i>Sinonatrix percarinata</i>	乌华游蛇	(Boulenger, 1899)			<i>Trimerodytes percarinatus</i>	–	–	
		<i>Sinonatrix yapingi</i>	景东华游蛇	Guo, Zhu, and Liu, 2019			<i>Trimerodytes yapingi</i>	–	(Guo, Zhu, and Liu, 2019)	
		<i>Sinonatrix yunnanensis</i>	云南华游蛇	Rao and Yang, 1998			<i>Trimerodytes yunnanensis</i>	–	(Rao and Yang, 1998)	

表3 2015–2019年两栖、爬行动物已知属在我国的新纪录

Table 3 New country records of recognized genera of amphibians and reptiles of China between 2015 and 2019

新纪录属中文名 Chinese common name	新纪录属学名 Scientific name	该属在我国新纪录代表物种 Representative species in China	文献 Reference
两栖动物 Amphibians			
南亚陆蛙属	<i>Minervarya</i>	清迈陆蛙 <i>Minervarya chiangmaiensis</i>	Hui et al, 2019
爬行动物 Reptiles			
伞虎属	<i>Ptychozoon</i>	版纳伞虎 <i>Ptychozoon bannaense</i>	Wang YY et al, 2016
扁头蛇属	<i>Platyceps</i>	红脊扁头蛇 <i>Platyceps rhodorachis</i>	郭克疾等, 2018
坡普蝮属	<i>Popeia</i>	坡普竹叶青蛇 <i>Popeia popeorum</i>	Guo P et al, 2015

表4 2015–2019年间描述或恢复有效性的中国两栖动物新物种。“Comb. nov.”表示本文首次将该物种划归至现所在属；命名人引用格式中的括号代表该物种在本文中采纳的属级分类与其原始描述不同。

Table 4 Newly described or resurrected species of amphibians from China between 2015 and 2019

年份 Year	中文名 Chinese common name	学名 Scientific name	命名人 Taxonomic authority	参考文献 Reference	
2015	费氏刘树蛙	<i>Liuixalus feii</i>	Yang, Rao, and Wang, 2015	Yang et al, 2015	
	十万大山刘树蛙	<i>Liuixalus shiwandashan</i>	Li, Mo, Jiang, Xie, and Jiang, 2015	Qin et al, 2015	
	封开臭蛙	<i>Odorrana fengkaiensis</i>	Wang, Lau, Yang, Chen, Liu, Pang, and Liu, 2015	Wang YY et al, 2015	
	荔浦臭蛙	<i>Odorrana lipuensis</i>	Mo, Chen, Wu, Zhang, and Zhou, 2015	Mo et al, 2015	
2016	白刺湍蛙	<i>Amolops albispinus</i>	Sung, Wang, and Wang, 2016	Sung et al, 2016	
	林芝湍蛙	<i>Amolops nyingchiensis</i>	Jiang, Wang, Xie, Jiang, and Che, 2016	Jiang et al, 2016a	
	碧眼原指树蛙	<i>Kurixalus berylliniris</i>	Wu, Huang, Tsai, Li, Jhang, and Wu, 2016	Wu et al, 2016	
	王氏原指树蛙	<i>Kurixalus wangi</i>	Wu, Huang, Tsai, Li, Jhang, and Wu, 2016	Wu et al, 2016	
	腾冲掌突蟾	<i>Leptobranchella tengchongensis</i>	(Yang, Wang, Chen, and Rao, 2016)	Yang et al, 2016b	
	腾冲拟髭蟾	<i>Leptobranchium tengchongense</i>	Yang, Wang, and Chan, 2016	Yang et al, 2016a	
	陇川大头蛙	<i>Limnodynastes longchuanensis</i>	Suwannapoom, Yuan, Chen, Sullivan, and McLeod, 2016	Suwannapoom et al, 2016	
	墨脱棱鼻树蛙	<i>Nasutixalus medogensis</i>	Jiang, Wang, Yan, and Che, 2016	Jiang et al, 2016c	
	吴氏肥螈	<i>Pachytriton wuguanfui</i>	Yuan, Zhang, and Che, 2016	Yuan et al, 2016c	
	橙脊瘰螈	<i>Paramesotriton aurantius</i>	Yuan, Wu, Zhou, and Che, 2016	Yuan et al, 2016b	
	平龙树蛙	<i>Zhangixalus pinglongensis</i>	(Mo, Chen, Liao, and Zhou, 2016)	Mo et al, 2016	
	刺疣齿突蟾	<i>Scutiger spinosus</i>	Jiang, Wang, Li, and Che, 2016	Jiang et al, 2016c	
	2017	新都桥湍蛙	<i>Amolops xinduqiao</i>	Fei, Ye, Wang, and Jiang, 2017	Fei et al, 2017
		太田溪树蛙	<i>Buergeria otai</i>	Wang, Hsiao, Lee, Tseng, Lin, Komaki, and Lin, 2017	Wang Y et al, 2017
井冈纤树蛙		<i>Gracixalus jinggangensis</i>	Zeng, Zhao, Chen, Chen, Zhang, and Wang, 2017	Zeng et al, 2017	
冷泉原指树蛙		<i>Kurixalus lenquanensis</i>	Yu, Wang, Hou, Rao, and Yang, 2017	Yu et al, 2017	
猫儿山掌突蟾		<i>Leptobranchella maoershanensis</i>	(Yuan, Sun, Chen, Rowley, and Che, 2017)	Yuan et al, 2017	
南澳岛角蟾		<i>Megophrys insularis</i>	(Wang, Liu, Lyu, Zeng, and Wang, 2017)	Wang J et al, 2017	
荔波角蟾		<i>Megophrys liboensis</i>	(Zhang, Li, Xiao, Li, Pan, Wang, Zhang, and Zhou, 2017)	Zhang et al, 2017	
丽水角蟾		<i>Megophrys lishuiensis</i>	(Wang, Liu, and Jiang, 2017)	王聿帆等, 2017	
红股角蟾		<i>Megophrys rubrimera</i>	Tapley, Cutajar, Mahony, Chung, Dau, Nguyen, Luong, and Rowley, 2017	Tapley et al, 2017	
藏南棘蛙		<i>Nanorana arunachalensis</i>	(Saikia, Sinha, and Kharkongor, 2017)	Saikia et al, 2017; Qi et al, 2019a	
南昆山琴蛙		<i>Nidirana nankunensis</i>	Lyu, Zeng, Wang, Lin, Liu, and Wang, 2017	Lyu et al, 2017	
大别山林蛙		<i>Rana dabieshanensis</i>	Wang, Qian, Zhang, Guo, Pan, Wu, Wang, and Zhang, 2017	Wang CC et al, 2017	
栾川林蛙		<i>Rana luanchuanensis</i>	Zhao and Yuan, 2017	Zhao et al, 2017	

表4 (续) Table 4 (continued)

年份 Year	中文名 Chinese common name	学名 Scientific name	命名人 Taxonomic authority	参考文献 Reference
	丽水树蛙	<i>Zhangixalus lishuiensis</i>	(Liu, Wang and Jiang, 2017)	Liu et al, 2017
	安徽树蛙	<i>Zhangixalus zhokaiyai</i>	(Pan, Zhang, and Zhang, 2017)	Pan et al, 2017
	安徽疣螈	<i>Tylosotriton anhuiensis</i>	Qian, Sun, Li, Guo, Pan, Kang, Wang, Jiang, Wu, and Zhang, 2017	Qian et al, 2017
2018	文山湍蛙	<i>Amolops wenshanensis</i>	Yuan, Jin, Li, Stuart, and Wu, 2018	Yuan et al, 2018
	云开湍蛙	<i>Amolops yunkaiensis</i>	Lyu, Wang, Liu, Zeng, and Wang, 2018	Lyu et al, 2018
	广东纤树蛙	<i>Gracixalus guangdongensis</i>	Wang, Zeng, Lyu, Liu, and Wang, 2018	Wang J et al, 2018b
	田林纤树蛙	<i>Gracixalus tianlinensis</i>	Chen, Bei, Liao, Zhou, and Mo, 2018	Chen WC et al, 2018
	杨氏原指树蛙	<i>Kurixalus yangi</i>	Yu, Hui, Rao, and Yang, 2018	Yu et al, 2018
	莽山掌突蟾	<i>Leptobranchella mangshanensis</i> comb. nov.	(Hou, Zhang, Hu, Li, Shi, Chen, Mo, and Wang, 2018)	Hou et al, 2018
	紫棕掌突蟾	<i>Leptobranchella purpura</i> comb. nov.	(Yang, Zeng, and Wang, 2018)	Yang et al, 2018b
	五皇山掌突蟾	<i>Leptobranchella wu Huangmontis</i>	Wang, Yang, and Wang, 2018	Wang J et al, 2018a
	盈江掌突蟾	<i>Leptobranchella yingjiangensis</i> comb. nov.	(Yang, Zeng, and Wang, 2018)	Yang et al, 2018b
	云开掌突蟾	<i>Leptobranchella yunkaiensis</i>	Wang, Li, Lyu, and Wang, 2018	Wang J et al, 2018a
	费氏角蟾	<i>Megophrys feii</i>	Yang, Wang, and Wang, 2018	Yang et al, 2018a
	雷山角蟾	<i>Megophrys leishanensis</i>	Li, Xu, Liu, Jiang, Wei, and Wang, 2018	Li SZ et al, 2018b
	北仑姬蛙	<i>Microhyla beilunensis</i>	Zhang, Fei, Ye, Wang, Wang, and Jiang, 2018	Zhang et al, 2018
	盈江棱鼻树蛙	<i>Nasutixalus yingjiangensis</i>	Yang and Chan, 2018	Yang & Chan, 2018
	贵州臭蛙	<i>Odorrana kweichowensis</i>	Li, Xu, Lv, Jiang, Wei, and Wang, 2018	Li SZ et al, 2018a
	南方肥螈	<i>Pachytriton airobranchiatus</i>	Li, Yuan, and Wu, 2018	Li C et al, 2018
2019	孟定湍蛙	<i>Amolops mengdingensis</i>	Yu, Wu, and Yang, 2019	Yu et al, 2019d
	陈塘湍蛙	<i>Amolops pallasitatus</i>	Qi, Zhou, Lyu, Lu, and Li, 2019	Qi et al, 2019b
	水城湍蛙	<i>Amolops shuichengicus</i>	Lyu and Wang, 2019	Lyu et al, 2019c
	中华湍蛙	<i>Amolops sinensis</i>	Lyu, Wang, and Wang, 2019	Lyu et al, 2019a
	逸仙湍蛙	<i>Amolops yatseni</i>	Lyu, Wang, and Wang, 2019	Lyu et al, 2019a
	华南大鲵	<i>Andrias sligoi</i>	(Boulenger, 1924)	Turvey et al, 2019
	云南纤树蛙	<i>Gracixalus yunnanensis</i>	Yu, Hui, Wang, Rao, Wu, and Yang, 2019	Yu et al, 2019a
	毕节掌突蟾	<i>Leptobranchella bijie</i>	Wang, Li, Li, Chen, and Wang, 2019	Wang J et al, 2019a
	紫腹掌突蟾	<i>Leptobranchella purpuraventra</i>	Wang, Li, Li, Chen, and Wang, 2019	Wang J et al, 2019a
	上思掌突蟾	<i>Leptobranchella shangsiensis</i>	Chen, Liao, Zhou, and Mo, 2019	Chen WC et al, 2019
	河谷舌突蛙	<i>Liurana valleculea</i>	Jiang, Wang, Wang, Li, and Che, 2019	Jiang K et al, 2019
	东莞角蟾	<i>Megophrys dongguanensis</i>	Wang and Wang, 2019	Wang J et al, 2019c
	九连山角蟾	<i>Megophrys jiulianensis</i>	Wang, Zeng, Lyu, and Wang, 2019	Wang J et al, 2019c
	幕阜山角蟾	<i>Megophrys mufumontana</i>	Wang, Lyu, and Wang, 2019	Wang J et al, 2019c
	南昆山角蟾	<i>Megophrys nankunensis</i>	Wang, Zeng, and Wang, 2019	Wang J et al, 2019c
	南岭角蟾	<i>Megophrys nanlingensis</i>	Lyu, Wang, Liu, and Wang, 2019	Wang J et al, 2019c
	雨神角蟾	<i>Megophrys ombrophila</i>	Messenger and Dahn, 2019	Messenger et al, 2019
	舜皇角蟾	<i>Megophrys shunhuangensis</i>	Wang, Deng, Liu, and Liu, 2019	Wang L et al, 2019
	武功山角蟾	<i>Megophrys wugongensis</i>	Wang, Lyu, and Wang, 2019	Wang J et al, 2019c
	梵净山姬蛙	<i>Microhyla fanjingshanensis</i>	Li, Zhang, Xu, Lv, Jiang, Liu, Wei, and Wang, 2019	Li SZ et al, 2019b
	隆子棘蛙	<i>Nanorana zhaormii</i>	Qi, Zhou, Lu, Li, Qin, Hou, Zhang, Ma, and Li, 2019	Qi et al, 2019a
	雷山琴蛙	<i>Nidirana leishanensis</i>	Li, Wei, Xu, Cui, Fei, Jiang, Liu, and Wang, 2019	Li SZ et al, 2019a
	瑶琴蛙	<i>Nidirana yaoica</i>	Lyu, Mo, Wan, Li, Pang, and Wang, 2019	Lyu et al, 2019b
	沧源灌树蛙	<i>Raorchestes cangyuanensis</i>	Wu, Suwannapoom, Xu, Murphy, and Che, 2019	Wu et al, 2019
	腾冲齿突蟾	<i>Scutigera tengchongensis</i>	Yang and Huang, 2019	Yang & Huang, 2019
	突肛树蛙	<i>Zhangixalus pachyproctus</i>	Yu, Hui, Hou, Wu, Rao, and Yang, 2019	Yu et al, 2019b

类单系原则及形态差异, 否定以下6种的有效性: 凉山湍蛙(*Amolops liangshanensis*)为棕点湍蛙(*A. loloensis*)的次定同物异名(Lyu et al, 2019c), 广西棱皮树蛙(*Theلودerma kwangsiense*)为北部湾棱皮树蛙(*T. corticale*)的次定同物异名(Hou et al, 2017), 大围山疣螈(*Tylototriton daweishanensis*)为滇南疣螈(*T. yangi*)的次定同物异名(Nishikawa et al, 2015), *Nidirana caldwelli*为弹琴蛙(*N. adenopleura*)的次定同物异名(Lyu et al, 2017), 金秀刘树蛙(*Liuxalus jinxiuensis*)为同年发表的费氏刘树蛙(*L. feii*)的次定同物异名

(Pham et al, 2018), 河口水蛙(*Hylarana hekouensis*)和勐腊水蛙(*H. menglaensis*)为黑带水蛙(*H. nigrovittata*)的次定同物异名(Sheridan & Stuart, 2018)。此外, 依据模式标本的形态学对比结果, 将*Rhacophorus maximus*定为*R. smaragdinus*的次定同物异名(Ohler & Deuti, 2018), 而其对应中文名则保留“白颌大树蛙”(表6)。

2.2 爬行动物分类变更

2.2.1 2015–2019年间分类变更

依据分子系统学研究结果, 我国爬行动物高级

表5 2015–2019年间两栖动物已知物种在中国的新纪录及其分布。“–”表示无其他曾用中文名或同物异名。

Table 5 New country records of recognized species of amphibians and their distribution in China between 2015 and 2019. “–” indicates no previously used Chinese common name or junior synonym.

现中文名 Revised Chinese common name	现学名 Scientific name	曾用中文名 Previously used Chinese common name	同物异名 Junior synonyms	我国分布地 Distribution in China	参考文献 Reference
克钦湍蛙	<i>Amolops afghanus</i>	–	<i>Amolops marmoratus</i>	云南(盈江) Yunnan (Yingjiang)	Yang 1991; Dever et al, 2012; Lyu et al, 2019c
布氏掌突蟾	<i>Leptobranchella bourreti</i>	–	<i>Leptolalax bourreti</i>	云南(文山、红河); 广西(桂林) Yunnan (Wenshan and Honghe); Guangxi (Guilin)	Chen JM et al, 2018
拂晓掌突蟾	<i>Leptobranchella eos</i>	–	<i>Leptolalax eos</i>	云南(西双版纳) Yunnan (Xishuangbanna)	Chen JM et al, 2018
夜神掌突蟾	<i>Leptobranchella nyx</i>	–	<i>Leptolalax nyx</i>	云南(文山) Yunnan (Wenshan)	Chen JM et al, 2018
波普拟髭蟾	<i>Leptobranchium bompu</i>	–	–	西藏(墨脱) Tibet (Medog)	Liang et al, 2017
泰诺大头蛙	<i>Limnonectes taylori</i>	–	–	云南(西双版纳) Yunnan (Xishuangbanna)	Suwannapoom et al, 2016
茅索角蟾	<i>Megophrys maasonensis</i>	–	<i>Xenophrys maasonensis</i>	云南(文山) Yunnan (Wenshan)	Chen JM et al, 2017
穆氏姬蛙	<i>Microhyla mukhlesuri</i>	–	–	云南(红河) Yunnan (Honghe)	Yuan et al, 2016a
清迈陆蛙	<i>Minervarya chiangmaiensis</i>	–	<i>Fejervarya chiangmaiensis</i>	云南(普洱) Yunnan (Puer)	Hui et al, 2019
罗斯坦棘蛙	<i>Nanorana rostandi</i>	–	<i>Paa rostandi</i> , <i>Rana rostandi</i> , <i>Chaparana rostandi</i>	西藏(吉隆) Tibet (Jilong)	蒋珂等, 2016
沙巴琴蛙	<i>Nidirana chapaensis</i>	–	<i>Hylarana chapaensis</i> , <i>Rana chapaensis</i>	云南(红河) Yunnan (Honghe)	Yuan et al, 2019
北圻臭蛙	<i>Odorana bacboensis</i>	–	<i>Rana bacboensis</i> , <i>Huia bacboensis</i>	云南(河口); 广西(那坡) Yunnan (Hekou); Guangxi (Napo)	Wang YY et al, 2015
安子山臭蛙	<i>Odorana yentuensis</i>	–	–	广西(十万大山) Guangxi (Shiwandashan)	卢琳琳等, 2016
德氏瘰螈	<i>Paramesotriton deloustali</i>	–	<i>Mesotriton deloustali</i> , <i>Pachytriton deloustali</i>	云南(红河) Yunnan (Honghe)	Zhang et al, 2018
侏灌树蛙	<i>Raorchestes parvulus</i>	–	<i>Ixalus parvulus</i> , <i>Rhacophorus</i> <i>parvulus</i> , <i>Philautus parvulus</i>	云南(西双版纳) Yunnan (Xishuangbanna)	Yu et al, 2019c
双色棱皮树蛙	<i>Theلودerma bicolor</i>	–	<i>Rhacophorus leprosus bicolor</i>	云南(景东) Yunnan (Jingdong)	Hou et al, 2017
印支棱皮树蛙	<i>Theلودerma gordonii</i>	–	–	云南(西双版纳) Yunnan (Xishuangbanna)	Qi et al, 2018
蔡氏疣螈	<i>Tylototriton zieglerei</i>	–	<i>Yaotriton zieglerei</i>	云南(文山) Yunnan (Wenshan)	Jiang et al, 2017

表6 2015–2019年间中国两栖、爬行动物种级同物异名厘定。“原中文名”指蔡波等(2015)、《中国两栖类信息系统》或其他中文文献曾使用的中文名。“-”表示该项未有变动。

Table 6 Species-level taxonomic changes for the amphibians and reptiles of China between 2015 and 2019. The former Chinese common names are the ones used in the previous reptilian checklist by Cai et al (2015) and other Chinese literature. “-” indicates no change.

原中文名 Chinese common name	原学名 Previous scientific name (junior synonym)	首定同物异名中文名 Chinese common name of the senior synonym	首定同物异名学名 Scientific name of the senior synonym	参考文献 Reference
两栖动物 Amphibians				
金秀刘树蛙	<i>Liuixalus jinxiuensis</i>	费氏刘树蛙	<i>Liuixalus feii</i>	Pham et al, 2018
-	<i>Nidirana caldwelli</i>	弹琴蛙	<i>Nidirana adenopleura</i>	Lyu et al, 2017
白领大树蛙	<i>Rhacophorus maximus</i>	-	<i>Zhangixalus smaragdinus</i>	Ohler & Deuti, 2018; Jiang DC et al, 2019
河口水蛙	<i>Hylarana hekouensis</i>	黑带水蛙	<i>Hylarana nigrovittata</i>	Sheridan & Stuart, 2018
勐腊水蛙	<i>Hylarana menglaensis</i>			
广西棱皮树蛙	<i>Theloderma kwangsiensis</i>	北部湾棱皮树蛙	<i>Theloderma corticale</i>	Hou et al, 2017
大围山疣螈	<i>Tylototriton dawei-shanensis</i>	滇南疣螈	<i>Tylototriton yangi</i>	Nishikawa et al, 2015
爬行动物 Reptiles				
四川龙蜥	<i>Diploderma szechwanense</i>	横纹龙蜥	<i>Diploderma fasciatum</i>	Ota, 2000
岩栖蝮	<i>Gloydus saxatilis</i>	中介蝮	<i>Gloydus intermedius</i>	Shi et al, 2016
独龙江攀蜥	<i>Japalura bapoensis</i>	西藏拟树蜥巴坡亚种	<i>Pseudocalotes kingdonwardi bapoensis</i>	Mahony, 2010; Wang K et al, 2019a
贵南沙蜥	<i>Phrynocephalus guinanensis</i>	贵德沙蜥	<i>Phrynocephalus putjatai</i>	Jin et al, 2014; Jin & Brown, 2019
云南颈斑蛇	<i>Plagiopholis unipostocularis</i>	颈斑蛇	<i>Plagiopholis blakewayi</i>	Zhong et al, 2015
越南巨蜥	<i>Varanus vietnamensis</i>	暗影巨蜥	<i>Varanus nebulosus</i>	Böhme & Ziegler, 1997; Böhme, 2003; 杨大同和饶定齐, 2008

分类阶元中游蛇科(Colubridae)内新增1亚科, 即瘦蛇亚科(Ahaetuliinae) (Figueroa et al, 2016), 我国分布的瘦蛇属(*Ahaetulla*)、金花蛇属(*Chrysopelea*)和过树蛇属(*Dendrelaphis*)隶属于该亚科。

游蛇科下原有的5亚科提升至科, 包括两头蛇科(Calamariidae)、食螺蛇科(Dipsadidae)、水游蛇科(Natricidae)、斜鳞蛇科(Pseudoxenodontidae)与剑蛇科(Sibynophiidae)。受采样和可使用数据的限制, 游蛇科下各亚科的系统地位长期以来一直存在争议 (Stejneger, 1907; Smith, 1943; Zaher et al, 2009; Wallach et al, 2014), 而我国学者历史上则并未强调对游蛇科下各亚科的划分(四川省生物研究所两栖爬行动物研究室, 1977; Zhao & Adler, 1993; 赵尔宓等, 1998; 赵尔宓, 2006; 蔡波等, 2015)。Zaher等(2019)基于分子系统学和形态学研究, 支持先前研究对游蛇科做出的分类建议(Zaher et al, 2009), 即将其所辖8个亚科中除游蛇亚科(Colubrinae)与瘦蛇亚科外的其他6个亚科上升为科级; 对于原游蛇科内仍无DNA分子数据的珠光蛇属(*Blythia*), 依据半

阴茎形态特征, Zaher等(2019)建议将其暂置于水游蛇科内。基于近期Zaher等(2019)和Burbrink等(2019)的研究结果, 本文暂采纳其观点。变更后, 我国原游蛇科下辖的40属现隶属于6科, 即两头蛇科(1属)、游蛇科(19属)、食螺蛇科(2属)、水游蛇科(15属)、斜鳞蛇科(2属)和剑蛇科(1属); 而变更后游蛇科内仅存2亚科, 即游蛇亚科与瘦蛇亚科。

新描述1属, 即*Smithophis*。Giri等(2019b)依据多基因片段的分子系统学研究指出, 黄腹杆蛇(*Rhabdops bicolor*)与该属模式种*R. oliveceus*不成单系, 加之两大支系间存在形态差异(如鼻间鳞和前额鳞数量), 因此提议将黄腹杆蛇所代表支系命名为一新属, 即*Smithophis*, 中文名则沿用“杆蛇属”(中文名变动详见下文)。由于厘定后我国已无真正的*Rhabdops*属物种分布, 故在此将*Rhabdops*从我国爬行动物名录中移除(表1)。

恢复爬行动物3属的有效性, 即龙蜥属(*Diploderma*) (Wang K et al, 2019a)、颈棱蛇属(*Pseudoagkistrodon*) (中文名变动见下文; Takeuchi et al, 2018)和环游蛇

属(*Trimerodytes*) (Ren et al, 2019)。基于多基因片段的分子系统学研究, Wang K等(2019a)支持原广义攀蜥属(*Japalura sensu lato*)并非单系(Macey et al, 2000; Pyron et al, 2013), 结合形态数据, 建议将广义攀蜥属拆分为4属, 其中3属有物种分布于我国: 长肢攀蜥(*J. andersoniana*)和三棱攀蜥(*J. tricarinata*)保留在狭义攀蜥属; 独龙江攀蜥(*J. bapoensis*)划至拟树蜥属(*Pseudocalotes*), 并暂恢复其亚种地位, 即西藏拟树蜥巴坡亚种(*P. kingdonwardi bapoensis*); 而中国境内其余物种被划归为恢复的龙蜥属; 伴随着属名词性变更, 我国龙蜥属部分物种的学名种加词也随之发生变动(王凯等, 2019b; 表2)。Takeuchi等(2018)研究显示, 原颈棱蛇属(*Macropisthodon*)并非单系, 其模式种(*M. flaviceps*)所代表的支系嵌于颈槽蛇属(*Rhabdophis*)内, 同时均具有颈腺; 而分布在我国的颈棱蛇(*M. rudis*)则代表了一个独立演化支系, 且缺乏颈腺。因此结合形态与分子系统学结果, Takeuchi等(2018)基于单系性原则, 将该类群重新厘定: 一方面, 恢复颈棱蛇所代表的演化支系的先占属名*Pseudoagkistrodon*, 而颈棱蛇学名因此变更为*Pseudoagkistrodon rudis* (其属、种中文名保持不变, 见下文); 另一方面, 废除*Macropisthodon*的有效性, 将其归并为颈槽蛇属的次定同物异名, 包括其模式种*M. flaviceps*在内的属内其余物种均归于颈槽蛇属。Ren等(2019)依据线粒体基因片段的分子系统学研究, 发现横纹后棱蛇(*Opisthotropis balteata*)嵌于华游蛇属(*Sinonatrix*)中, 且与华游蛇属模式种赤链华游蛇(*S. annularis*)互为姐妹群, 致使华游蛇属与后棱蛇属(*Opisthotropis*)互不成单系。由于横纹后棱蛇所代表的属级次定同物异名*Trimerodytes*的命名时间早于华游蛇属, 考虑到维护分类单系性原则和命名优先权, Ren等(2019)建议恢复*Trimerodytes*的有效性(中文名拟定为“环游蛇属”), 并将华游蛇属视为该属的次定同物异名(物种中文名变动见下文)(表1, 2)。

另外, 由于已知属的物种在我国的新分布纪录, 新增加3属在中国的纪录, 即扁头蛇属(*Platyceps*) (郭克疾等, 2018; 中文名变动见下文)、坡普蝮属(*Popeia*) (Guo P et al, 2015)和伞虎属(*Ptychozoon*) (Wang YY et al, 2016) (表3)。

除上述废除的原颈棱蛇属和华游蛇属, 另废除爬行动物3属的有效性, 包括晨蛇属(*Orthriophis*)、异

纹蛇属(*Pararhabdophis*)和异鳞蜥属(*Oriocalotes*)。Chen X等(2017)基于简化基因组的分子系统学研究表明, 晨蛇属嵌于狭义锦蛇属(*Elaphe sensu stricto*)内, 将晨蛇属视为狭义锦蛇属次定同物异名; 因此, 我国的坎氏晨蛇(*O. cantoris*)、南峰晨蛇(*O. hodgsonii*)、百花晨蛇(*O. moellendorffi*)和黑眉晨蛇(*O. taeniurus*)均改回至锦蛇属内(涉及物种的中文名变动见下文)。依据线粒体基因片段的分子系统学分析, Ren等(2018)研究表明异纹蛇属为东亚腹链蛇属(*Hebius*)的次定同物异名; 因此新记录于我国的*Pararhabdophis chapaensis*则改隶于东亚腹链蛇属, 中文名则拟定为“沙坝腹链蛇”。Giri等(2019a)利用多基因片段的分子系统学研究指出, 异鳞蜥属物种嵌于树蜥属(*Calotes*)内部, 故将异鳞蜥属视为树蜥属的次定同物异名(表2)。

暂不接受近期关于翠青蛇属(*Cyclophiops*)和异色蛇属(*Xenochrophis*)的高阶元分类变动(所涉及的异色蛇属中文名变动见下文)。Figuroa等(2016)的分子系统学研究表明翠青蛇属中翠青蛇(*C. major*)和横纹翠青蛇(*C. multicinctus*)嵌于鼠蛇属(*Ptyas*)物种所在支系中, 因此建议将翠青蛇属视为鼠蛇属的次定同物异名; 然而, 该研究结果并未包含翠青蛇属模式种纯绿翠青蛇(*C. doriae*), 其结论有待进一步研究, 因此本文暂未采纳其观点。Purkayastha和David (2018)研究表明异色蛇属的物种并非单系, 其中滇西蛇属(*Atretium*)模式种*Atretium schistosum*与部分颈槽蛇属物种均嵌于异色蛇属中; 结合部分形态学数据, Purkayastha和David(2018)建议将原异色蛇属中*X. piscator*, *X. asperrimus*, *X. schnurrenbergeri*及*X. punctualatus*所代表的支系恢复为异色蛇属原次定同物异名*Fowlea* (模式种*X. punctualatus*), 而将异色蛇属限定为其模式种*X. cerasogaster*所代表的支系。然而, 由于滇西蛇属本身的分类存疑, 且大多数支系间的系统关系尚未得到解决。鉴于该属的属级分类在将来极可能产生新的变动, 因此本文沿用蔡波等(2015)关于该类群的保守分类, 暂未采纳Purkayastha和David(2018)的分类。

在种级分类阶元上, 发现并描述爬行动物新物种35种(表7)。新物种中, 有4种在本文中所采纳的属级分类地位与其原始描述不同: 依据Denzer等(2019)以及王凯等(2019b), 将侏攀蜥(*Japalura drukdaypo*)改至龙蜥属, 即*Diploderma drukdaypo*, 而其中文名

表7 2015–2019年间新描述或恢复有效性的中国爬行动物物种。“Comb. nov.”表示本文首次将该物种划归至现所在属; 命名人引用格式中的括号代表该物种在本文中采纳的属级分类与其原始描述不同。

Table 7 Newly described or resurrected species of reptiles from China between 2015 and 2019

年份 Year	中文名 Chinese common name	学名 Scientific name	命名人 Taxonomic authority	参考文献 Reference
2015	帆背龙蜥	<i>Diploderma vela</i>	(Wang, Jiang, Pan, Hou, Siler, and Che, 2015)	Wang K et al, 2015
	广西壁虎	<i>Gekko kwangsiensis</i>	Yang, 2015	Yang, 2015
	嘉道理睑虎	<i>Goniurosaurus kadoorieorum</i>	Yang and Chan, 2015	Yang & Chan, 2015
	广西睑虎	<i>Goniurosaurus kwangsiensis</i>	Yang and Chan, 2015	Yang & Chan, 2015
	昌宁半叶趾虎	<i>Hemiphyllodactylus changningensis</i>	Guo, Zhou, Yan, and Li, 2015	Guo WB et al, 2015
	泰雅钝头蛇	<i>Pareas atayal</i>	You, Poyarkov, and Lin, 2015	You et al, 2015
	阿里山钝头蛇	<i>Pareas komaii</i>	(Maki, 1931)	You et al, 2015
2016	翡翠龙蜥	<i>Diploderma iadinum</i>	(Wang, Jiang, Siler, and Che, 2016)	Wang K et al, 2016
	滑腹龙蜥	<i>Diploderma laeiventre</i>	(Wang, Jiang, Siler, and Che, 2016)	Wang K et al, 2016
	龟山壁虎	<i>Gekko guishanicus</i>	Lin and Yao, 2016	Lin & Yao, 2016
	惠水半叶趾虎	<i>Hemiphyllodactylus huishuiensis</i>	Yan, Lin, Guo, Li, and Zhou, 2016	Yan J et al, 2016
	版纳伞虎	<i>Ptychozoon bannaense</i>	Wang, Wang, and Liu, 2016	Wang YY et al, 2016
2017	贡山龙蜥	<i>Diploderma slowinskii</i>	(Rao, Vindum, Ma, Fu, and Wilkinson, 2017)	Rao et al, 2017
	红斑高山蝮	<i>Gloydus rubromaculatus</i>	Shi, li, and Liu, 2017	Shi et al, 2017
	深圳后棱蛇	<i>Opisthotropis shenzhenensis</i>	Wang, Guo, Liu, Lyu, Wang, Luo, Sun, and Zhang, 2017	Wang YY et al, 2017b
	赵氏后棱蛇	<i>Opisthotropis zhaoermii</i>	Ren, Wang, Jiang, Guo, and Li, 2017	Ren et al, 2017
	钓鱼岛石龙子	<i>Plestiodon takarai</i>	Kurita, Ota, and Hikida, 2017	Kurita et al, 2017a
	天井山草蜥	<i>Takydromus albomaculosus</i>	Wang, Gong, Liu, and Wang, 2017	Wang YY et al, 2017a
2018	贡山两头蛇	<i>Calamaria andersoni</i>	Yang and Zheng, 2018	Yang & Zheng, 2018
	若尔盖蝮	<i>Gloydus angusticeps</i>	Shi, Yang, Huang, Orlov, and Li, 2018	Shi et al, 2018
	周氏睑虎	<i>Goniurosaurus zhoui</i>	Zhou, Wang, Chen, and Liang, 2018	Zhou et al, 2018
	盐边腹链蛇	<i>Hebius yanbianensis</i>	Liu, Zhong, Wang, Liu, and Guo, 2018	Liu et al, 2018
	香港半叶趾虎	<i>Hemiphyllodactylus hongkongensis</i>	Sung, Lee, Ng, Zhang, and Yang, 2018	Sung et al, 2018
	海南四眼斑水龟	<i>Sacalia insulensis</i>	Adler, 1962	林柳等, 2018
	海南华珊瑚蛇	<i>Sinomicrurus houi</i>	Wang, Peng, and Huang, 2018	Peng et al, 2018
2019	铜壁关棘蜥	<i>Acanthosaura tongbiguanensis</i>	Liu and Rao, 2019	Liu & Rao, 2019
	云开脊蛇	<i>Achalinus yunkaiensis</i>	Wang, Li, Wang, 2019	Wang J et al, 2019b
	侏龙蜥	<i>Diploderma drukdaypo</i>	(Wang, Ren, Jiang, Zou, Wu, Che, Siler, 2019)	Wang K et al, 2019d
	山地龙蜥	<i>Diploderma swild</i>	Wang, Wu, Jiang, Chen, Miao, Siler, Che, 2019	Wang K et al, 2019f
	澜沧蝮	<i>Gloydus huangi</i>	Wang, Ren, Dong, Jiang, Siler, Che, 2019	Wang K et al, 2019e
	桑植腹链蛇	<i>Hebius sangzhiensis</i>	Zhou, Qi, Lu, Lyu, Li, 2019	Zhou et al, 2019
	云开草蜥	<i>Takydromus yunkaiensis</i>	Wang, Lyu, Wang, 2019	Wang J et al, 2019d
	盈江竹叶青	<i>Popeia yingjiangensis</i> comb. nov.	(Chen, Ding, Shi, Zhang, 2019)	Chen ZN et al, 2019
	景东华游蛇	<i>Trimerodytes yapingi</i> comb. nov.	(Guo, Zhu, Liu, 2019)	Guo et al, 2019
	藏南竹叶青	<i>Himalayophis arunachalensis</i> comb. nov.	(Captain, Deepak, Pandit, Bhatt, Athreya, 2019)	Captain et al, 2019
	艾氏妮蛇	<i>Trachischium apteii</i>	Bhosale, Gowande, Mirza, 2019	Bhosale et al, 2019
	泪纹腹链蛇	<i>Hebius lacrima</i>	Purkayastha, David, 2019	Purkayastha & David, 2019

遵从王凯等(2019b)的建议, 改为“侏龙蜥”; Chen ZN 等 (2019) 和 Captain 等 (2019) 在描述 *Trimeresurus yingjiangensis* 和 *T. arunachalensis* 时采纳的均是广义竹叶青属的单属划分体系, 而依据其分子系统学结果, *T. yingjiangensis* 和 *T. arunachalensis* 分别与 *Popeia sabahi* 和西藏竹叶青蛇 (*Himalayophis tibetanus*) 聚为姐妹群, 因此在采纳广义竹叶青属多属划分的前提下, 本文将 *T. yingjiangensis* 和 *T. arunachalensis* 分别移至其姐妹种所在的坡普蝮属 (*Popeia*) 和喜山蝮属 (*Himalayophis*), 两种的学名遂改为 *Popeia yingjiangensis* 和 *Himalayophis arunachalensis*; 对于其中没有中文名的 *H. arunachalensis*, 将其中文名拟定为“藏南竹叶青蛇”; Guo 等 (2019) 描述景东华游蛇 (*Sinonatrix yapingi*) 的时间早于同年发表的关于华游蛇属的分类厘定 (Ren et al, 2019), 而依据 Guo 等 (2019) 的分子数据, 景东华游蛇与华游蛇属模式种聚为一支, 因此在采纳 Ren 等 (2019) 关于华游蛇属分类厘定的前提下, 本文将景东华游蛇划归至环游蛇属, 学名改称 *Trimerodytes yapingi*, 而物种中文名遵从原始描述的指定保持不变。

恢复 2 种的有效性, 即阿里山钝头蛇 (*Pareas komaii*) (You et al, 2015) 和海南四眼斑龟 (*Sacalia insulensis*) (林柳等, 2018)。提升 6 个亚种至种级水平: 将西伯利亚蝮阿拉善亚种 (*Gloydus halys cognatus*)、西伯利亚蝮华北亚种 (*G. h. stejnegeri*)、中介蝮长岛亚种 (*G. intermedius changdaoensis*)、中华石龙子白斑亚种 (*Plestiodon chinensis leucostictus*)、卡西裸趾虎察隅亚种 (*Cyrtodactylus khasiensis cayuensis*) 和快

步麻蜥东方亚种 (*Eremias velox roborowskii*) 提升至有效种, 分别为阿拉善蝮 (*G. cognatus*)、华北蝮 (*G. stejnegeri*)、长岛蝮 (*G. changdaoensis*)、白斑石龙子 (*P. leucostictus*)、察隅裸趾虎 (*C. cayuensis*) 和吐鲁番麻蜥 (*E. roborowskii*) (史静笄等, 2016; Kurita et al, 2017b; Agarwal et al, 2018; Chirikova et al, 2019; Liu et al, 2019) (表 8)。

此外, 新增加 8 种已知爬行动物在我国的分布纪录 (表 8); 同时, 移除 4 种爬行动物在我国的分布纪录, 即喜山攀蜥 (*Japalura kumaonensis*)、绿背攀蜥 (*J. sagittifera*)、卡西裸趾虎 (*Cyrtodactylus khasiensis*) 和双带腹链蛇 (*Hebius parallelus*)。原记录于我国的喜山攀蜥为三棱攀蜥 (*Japalura tricarinata*) 的误定 (Wang K et al, 2018a); 依据 Kunte 和 Manthey (2009) 的研究, 目前未有确切证据表明绿背攀蜥分布于我国境内, 故将蔡波等 (2015) 中记录的绿背攀蜥纪录移除; 原记录于我国西藏察隅的卡西裸趾虎察隅亚种已被升为独立种 (Agarwal et al, 2018), 同时依据现有数据, 卡西裸趾虎仅分布于印度东北部的梅加拉亚邦 (Meghalaya District), 故将其分布纪录移除; 而原记录于西藏南部和云南西南部的双带腹链蛇为克氏腹链蛇 (*H. clerki*) 的误定 (David et al, 2015), 故将其纪录移除。

否定了 4 种爬行动物的有效性。结合基于线粒体片段的分子系统学研究及形态学比较, 将云南颈斑蛇 (*Plagiopholis unipostocularis*) 定为颈斑蛇 (*Plagiopholis blakewayi*) 的次定同物异名 (Zhong et al, 2015); 支持原 Orlov 和 Barabannov (2000) 提出的观

表 8 2015–2019 年间由已知亚种提升而产生的爬行动物新物种

Table 8 The species that were elevated from recognized subspecies to the full species status between 2015 and 2019

原亚种中文名 Previous Chinese common name	原亚种学名 Previous scientific name of the subspecies	提升后物种中文名 Revised Chinese com- mon name of the species	提升后物种学名 Current scientific name of the elevated species	文献 Reference
卡西裸趾虎察隅亚种	<i>Cyrtodactylus khasiensis cayuensis</i>	察隅裸趾虎	<i>Cyrtodactylus cayuensis</i>	Agarwal et al, 2018
快步麻蜥东方亚种	<i>Eremias velox roborowskii</i>	吐鲁番麻蜥	<i>Eremias roborowskii</i>	Chirikova et al, 2019
西伯利亚蝮阿拉善亚种	<i>Gloydus halys cognatus</i>	阿拉善蝮	<i>Gloydus cognatus</i>	史静笄等, 2016
西伯利亚蝮华北亚种	<i>Gloydus halys stejnegeri</i>	华北蝮	<i>Gloydus stejnegeri</i>	
中介蝮长岛亚种	<i>Gloydus intermedius changdaoensis</i>	长岛蝮	<i>Gloydus changdaoensis</i>	
云南半叶趾虎独山亚种	<i>Hemiphyllodactylus yunnanensis dushanensis</i>	独山半叶趾虎	<i>Hemiphyllodactylus dushanensis</i>	Grismer et al, 2013
云南半叶趾虎金平亚种	<i>Hemiphyllodactylus yunnanensis jinpingensis</i>	金平半叶趾虎	<i>Hemiphyllodactylus jinpingensis</i>	
云南半叶趾虎龙陵亚种	<i>Hemiphyllodactylus yunnanensis longlingensis</i>	龙陵半叶趾虎	<i>Hemiphyllodactylus longlingensis</i>	
中华石龙子白斑亚种	<i>Plestiodon chinensis leucostictus</i>	白斑石龙子	<i>Plestiodon leucostictus</i>	Kurita et al, 2017b

表9 2015–2019年间中国爬行动物新纪录及其分布。“原中文名”指蔡波等(2015)或其他中文文献中曾经使用的中文名。“—”表示无其他曾用中文名或同物异名。

Table 9 New country records of recognized species of reptiles and their distribution in China between 2015 and 2019. The former Chinese common names are the ones used in the previous reptilian checklist by Cai et al (2015) and other Chinese literature. “—” indicates no previously used Chinese common names or junior synonyms.

采纳中文名 Revised Chinese common name	采纳学名 Current scientific name	原中文名 Previous Chinese common name	同物异名 Junior synonym	我国分布地 Distribution in China	文献 Reference
马来环蛇	<i>Bungarus candidus</i>	—	<i>Coluber candidus</i> , <i>Bungarus semifasciatus</i>	云南、广西、广东 Yunnan, Guangxi, and Guangdong	Xie et al, 2018
银山过树蛇	<i>Dendrelaphis ngansonensis</i>	—	<i>Dendrelaphis bioga boiga</i>	海南、云南 Hainan and Yunnan	Pope, 1935; Nicodemo & Bain, 2007
沙坝龙蜥	<i>Diploderma chapaense</i>	—	<i>Japalura chapaensis</i>	云南绿春 Yunnan (Lüchun)	Wang K et al, 2018b
横纹龙蜥	<i>Diploderma fasciatum</i>	四川龙蜥	<i>Japalura fasciata</i> , <i>Japalura szechwanensis</i>	云南、四川、江西、广东、 湖南 Yunnan Sichuan, Jiangxi, Guangdong, and Hunan	Ota, 2000; 王凯等, 2019b
沙坝腹链蛇	<i>Hebius chapaensis</i>	沙坝异纹蛇	<i>Pararhabdophis chapaensis</i>	云南屏边 Yunnan (Pingbian)	Ren et al, 2018
克氏腹链蛇	<i>Hebius clerki</i>	—	<i>Amphiesma clerki</i>	云南盈江 Yunnan (Yingjiang)	David et al, 2015
红脊扁头蛇	<i>Platyceps rhodorachis</i>	筒氏红鞭蛇	<i>Coluber rhodorachis</i>	西藏阿里 Tibet (Ali)	郭克疾等, 2018
坡普竹叶青蛇	<i>Popeia popeorum</i>	坡普蝮	<i>Trimeresurus popeiorum</i> , <i>Popeia popeiorum</i>	云南西双版纳 Yunnan (Xishuangbanna)	Guo P et al, 2015
混鳞蜥	<i>Pseudocalotes austeniana</i>	—	<i>Mictopholis austeniana</i>	西藏墨脱 Tibet (Medog)	Annandale, 1908; Athreya, 2006; Wang K et al, 2019b
耿氏坭蛇	<i>Trachischium guentheri</i>	—	—	西藏聂拉木 Tibet (Nielamu)	Wang K et al, 2019c
暗影巨蜥	<i>Varanus nebulosus</i>	越南巨蜥	<i>Varanus vietnamensis</i>	云南河口 Yunnan (Hekou)	饶定齐和杨大同, 1996; Böhme & Ziegler, 1997; Böhme, 2003

点, 将岩栖蝮(*Gloydus saxatilis*)定为中介蝮(*G. intermedius*)的次定同物异名(史静耸等, 2016); 支持原Mahony (2010)提出的观点, 将独龙江攀蜥定为西藏拟树蜥巴坡亚种的次定同物异名(Wang K et al, 2019a)。此外, 结合线粒体片段及简化基因组数据的分子系统学研究, 支持Jin等(2014)的观点, 将不成单系的贵南沙蜥(*Phrynocephalus guinanensis*)视为贵德沙蜥(*P. putjatai*)的次定同物异名(Jin & Brown, 2019) (表6)。

2.2.2 2015年前分类变动的增补

爬行动物高级分类阶元增补属级新纪录3个, 分别是树栖锦蛇属(*Gonyosoma*)、副后棱蛇属(*Paratapinophis*)及细趾虎属(*Tenuidactylus*)。Chen等(2014)依据多基因片段构建蛇类系统发育关系, 表明绿蛇属(*Rhadinophis*)和尖喙蛇属(*Rhynchophis*)均嵌于树栖锦蛇属(*Gonyosoma*)内, 因此将绿蛇属和尖喙蛇属定为树栖锦蛇属的次定同物异名, 而分布于我国的绿锦蛇(*Rhadinophis prasinus*)、灰腹绿锦蛇(*R. frenatus*)和尖喙蛇(*R. boulengeri*)因此均划入树栖锦蛇属内。蔡波等(2015)认为Chen等(2014)未结合

形态学数据, 未采纳这一观点。本文基于分类单系性原则, 同时考虑到Chen等(2014)在分类厘定后确实提供了树栖锦蛇属的形态鉴别特征(包括体型纤细、头狭长区别于颈、眼较大且瞳孔圆形、体中短背鳞光滑或微弱起棱等), 因此接受Chen等(2014)的分类观点, 而所涉及物种则恢复其惯用中文名称(详见下文)。Bauer等(2013)依据多基因片段构建了广义弯脚虎(*Cyrtopodion sensu lato*)的系统演化关系, 同时结合形态学数据, 将该类群物种的属级分类进行了厘定, 将长弯脚虎(*Cyrtopodion elongatum*)和大墩弯脚虎(*C. dadunense*)划入细趾虎属(*Tenuidactylus*), 本文采纳此观点, 所涉及物种学名的种加词也因此在此词性上做出相应改变(表1)。Murphy等(2008)认为老挝后棱蛇(*Opisthotropis praemaxillaris*)与后棱蛇属(*Opisthotropis*)其余物种在形态上存在明显差异, 包括头部形状和背鳞质感, 因此恢复了老挝后棱蛇所代表的属级次定同物异名副后棱蛇属(*Paratapinophis*)的有效性, 而老挝后棱蛇随之改隶至副后棱蛇属, 即老挝副后棱蛇(*Paratapinophis praemaxillaris*) (表2), 但蔡波等

(2015)未予引用或讨论。Ren等(2019)依据形态学证据,认为副后棱蛇属与环游蛇属*Trimerodytes*无法区分,提出其可能为后者的次定同物异名。鉴于对于副后棱蛇属仍缺乏系统学研究,故目前暂采纳Murphy等(2008)的观点,承认其有效性。

在种级分类方面,依据当前的研究结果,本文暂否定2种爬行动物有效性,即越南巨蜥(*Varanus vietnamensis*)和四川龙蜥(*Diploderma szechwanense*) (表9)。杨大同和刘万兆(1994)依据文献中暗影巨蜥(*Varanus nebulosus*)的形态特征,认为云南河口的巨蜥个体与其存在形态差异,故描述一新种,即越南巨蜥,而该分类观点被后续作者所采纳(饶定齐和杨大同,1996)。随后,Böhme和Ziegler (1997)指出越南巨蜥与暗影巨蜥在色斑上无法区分,故将越南巨蜥视为暗影巨蜥的次定同物异名。后期主要爬行动物名录均未收录越南巨蜥(赵尔宓等,1999;杨大同和饶定齐,2008),而近期蔡波等(2015)对二者均未予收录或讨论。基于Böhme和Ziegler (1997)的研究结果以及赵尔宓等(1999)和杨大同和饶定齐(2008)的观点,本文暂将越南巨蜥视为暗影巨蜥的次定同物异名。Ota (2000)通过对比四川龙蜥(原*Japalura szechwanensis*)与横纹龙蜥(*Diploderma fasciatum*) (原*Japalura fasciata*)的模式标本,认为二者在所检视的形态特征上一致,包括缺乏横向喉褶及鳞片特征,因此将命名较晚的四川龙蜥定为横纹龙蜥的次定同物异名,而该观点也被后续研究所采纳(Manthey, 2010; Wang K et al, 2019a; 王凯等, 2019b)。尽管部分学者未采纳Ota (2000)的分类建议(赵尔宓, 2004; 杨大同和饶定齐, 2008; 蔡波等, 2015),但他们均未提供另外更新的数据对Ota (2000)的观点进行讨论或反驳。因此,在没有新证据证明四川龙蜥有效性的情况下,本文暂采纳Ota (2000)的分类观点,将四川龙蜥定为横纹龙蜥的次定同物异名。由于暗影巨蜥及横纹龙蜥未被前期研究收录(蔡波等, 2015),因此这两物种也成为我国爬行动物的增补纪录。此外,依据正式报道记录于我国的实体标本,增补前期名录中遗漏的银山过树蛇(*Dendrelaphis ngansonensis*) (Pope, 1935; Nicodemo & Bain, 2007) (表9)。

Grismer等(2013)依据线粒体片段的分子系统学研究,考虑到单系性原则及较大的分子遗传距离,将云南半叶趾虎(*Hemiphyllodactylus yunnanensis*)的

3个亚种云南半叶趾虎金平亚种(*H. y. jinpingensis*)、龙陵亚种(*H. y. longlingensis*)及独山亚种(*H. y. dushanensis*)分别提升至有效种,即金平半叶趾虎(*H. jinpingensis*)、龙陵半叶趾虎(*H. longlingensis*)和独山半叶趾虎(*H. dushanensis*),本文采纳其观点(表9)。

乌拉尔沙蜥在我国原记录有3个亚种,即指名亚种(*P. g. guttatus*)、黑腹亚种(*P. g. melanurus*)和伊犁亚种(*P. g. alpherakii*) (赵尔宓等, 1999)。随后研究确定我国无指名亚种分布(Melville et al, 2009),而其余两个确有记录的亚种均已被提升为有效种(即伊犁沙蜥*P. alpherakii*和黑腹沙蜥*P. melanurus*; 蔡波等, 2015),因此我国已无乌拉尔沙蜥分布,故在此将其移除。

综上,截至2019年12月31日,我国共记录现生本土两栖动物3目13科64属515种,爬行动物3目35科135属511种(附录1, 2)。

2.3 爬行动物名称修改

2.3.1 学名订正

参照国际动物命名法中对于科名建立和属名词性的相关规定, Savage (2015)依据闪皮蛇科(*Xenodermatidae*)与钝头蛇科(*Pareatidae*)模式属的学名词性,对其科名提出了订正意见,分别将其修订为*Xenodermidae*与*Pareidae*,本文采纳其意见(附录2)。此外,依据国际动物命名法中的相同条款,本文对先前名录中4属49种物种的学名或命名人格式也进行了订正(附录1, 2)。

2.3.2 中文名修改建议

对蛇类新描述或提升的科与亚科,其中文名沿用相应类群的惯用中文名或依据科名/亚科名词源中的属名进行拟定,即瘦蛇亚科(*Ahaetuliinae*),两头蛇科(*Calamariidae*)、食螺蛇科(*Dipsadidae*)、水游蛇科(*Natricidae*)、斜鳞蛇科(*Pseudoxenodontidae*)与剑蛇科(*Sibynophiidae*) (赵尔宓等, 1993; 附录2)。

对已知物种及分类阶元的中文名,为避免学术著作间的混乱(赵尔宓等, 1993; 戴鑫等, 2001; 赵尔宓, 2006; 李建, 2007; 胡晓林, 2007; 杨大同和饶定齐, 2008; 郭宪光等, 2010; 蔡波等, 2015),同时遵循中文资料中的惯用情况,在蔡波等(2015)的基础上,对部分爬行动物中文名提出了修改建议。其中,本文建议将*Pythonidae*中文名由“蚺科”修改为“蟒科”,*Python*中文名由“蚺属”修改为“蟒属”,其属下物种中文名不变,保留“蟒”(*Python bivittatus*); 将

Boidae中文名由“蟒科”修改为“蚺科”, *Eryx*中文名由“沙蟒属”修改为“沙蚺属”, 其属下物种中文名也对应变更为“红沙蚺”(*Eryx miliaris*)及“东方沙蚺”(*E. tataricus*) (表10)。

依据拉丁文词源, 并接受王凯等(2019a)的建议, 将红鞭蛇属 *Platyceps* (郭克疾等, 2018)中文名修改为“扁头蛇属”, 而 *Platyceps rhodorachis*中文名由“简氏红鞭蛇”修改为“红脊扁头蛇”。接受郭鹏等(2008)的建议, 将 *Thermophis baileyi*中文名由“温泉蛇”修改为“西藏温泉蛇”。由于近期名录中 Lamprophiidae 的中文名“鳗形蛇科”既与拉丁文词源不符(Lampr-为希腊语, 意为“发光的”)、同时也未遵从以往中文资料中的习惯用法(模式属 *Lamprophis* 为“屋蛇属”; 赵尔宓等, 1993), 在此将 Lamprophiidae 的中文名由“鳗形蛇科”修改为“屋蛇科”。依据拉丁文词源, 本文将 *Coelognathus*中文名由“三索蛇属”修改为“颌腔蛇属”, 而其属下物种中文名恢复为先前惯用的“三索锦蛇”(*Coelognathus radiatus*) (表10)。

依据以往中文资料的习惯用法, 建议将原蔡波等(2015)名录中修改的以下中文名统一恢复为修改前的惯用中文名称: *Xenochrophis*的中文名由“异色蛇属”恢复为“渔游蛇属”, 其属下物种中文名相应恢复为“渔游蛇”(*Xenochrophis piscator*)和“黄斑渔游蛇”(*X. flavipunctatus*); 将 *Lycodon*的中文名称由“链蛇属”恢复为“白环蛇属”, 而其属内物种原隶属于 *Dinodon*属、已有惯用中文名、且蔡波等(2015)未进行变动的, 则保留其中文名称, 包括“黄链蛇”(*L. flavozonatus*)、“南方链蛇”(*L. meridionalis*)、“粉链蛇”(*L. rosozonatus*)、“赤链蛇”(*L. rufozonatus*)和“白链蛇”(*L. septentrionalis*), 而对于蔡波等(2015)改动的, 则恢复其先前惯用名称, 即将 *L. aulicus*由“白环链蛇”恢复为“白环蛇”、*L. fasciatus*由“双全链蛇”恢复为“双全白环蛇”、*L. laoensis*由“老挝链蛇”恢复为“老挝白环蛇”、*L. ruhstrati*由“黑背链蛇”恢复为“黑背白环蛇”、*L. septentrionalis*由“北链蛇”恢复为“白链蛇”、*L. subcinctus*由“细白链蛇”恢复为“细白环蛇”; 将原广义锦蛇属 (*Elaphe sensu lato*)物种的中文名恢复为原惯用名, 即将 *E. moellendorffi*中文名由“百花晨蛇”恢复为“百花锦蛇”、*E. taeniurus*由“黑眉晨蛇”恢复为“黑眉锦蛇”、*E. hodgsonii*由“南峰晨蛇”恢复为“南峰锦蛇”、*E. cantoris*由“坎氏晨蛇”恢复为“坎氏锦蛇”, *Gonyosoma prasinum*由“绿

表10 与蔡波等(2015)名录相比, 本文名录中分类未发生变动、仅中文名发生变化的部分爬行动物种、属及物种。“原中文名”指蔡波等(2015)或相关文献使用的中文名。

Table 10 Proposed changes for the Chinese common names for some of the reptilian species of China. The former Chinese common names refer to the ones used in the previous reptilian checklist by Cai et al (2015)

学名 Scientific name	原中文名 Previous Chinese common name	建议修改的中文名 Revised Chinese common name
科 Family		
Boidae	蟒科	蚺科
Lamprophiidae	鳗形蛇科	屋蛇科
Pythonidae	蚺科	蟒科
属 Genus		
<i>Coelognathus</i>	三索蛇属	颌腔蛇属
<i>Cyrtodactylus</i>	弯脚虎属	裸趾虎属
<i>Eryx</i>	沙蟒属	沙蚺属
<i>Lycodon</i>	链蛇属	白环蛇属
<i>Platyceps</i>	红鞭蛇属	扁头蛇属
<i>Python</i>	蚺属	蟒属
<i>Xenochrophis</i>	异色蛇属	渔游蛇属
种 Species		
<i>Coelognathus radiatus</i>	三索蛇	三索锦蛇
<i>Elaphe cantoris</i>	坎氏晨蛇	坎氏锦蛇
<i>Elaphe hodgsonii</i>	南峰晨蛇	南峰锦蛇
<i>Elaphe moellendorffi</i>	百花晨蛇	百花锦蛇
<i>Elaphe taeniura</i>	黑眉晨蛇	黑眉锦蛇
<i>Eremias quadrifrons</i>	方额麻蜥	四额鳞麻蜥
<i>Eryx miliaris</i>	红沙蟒	红沙蚺
<i>Eryx tataricus</i>	东方沙蟒	东方沙蚺
<i>Euprepiophis mandarinus</i>	玉斑蛇	玉斑锦蛇
<i>Euprepiophis perlaceus</i>	横斑玉斑蛇	横斑锦蛇
<i>Hemorrhhois ravergeri</i>	密纹蛇	花脊游蛇
<i>Himalayophis tibetanus</i>	西藏喜山蝮	西藏竹叶青蛇
<i>Hypsiscopus plumbea</i>	铅色蛇	铅色水蛇
<i>Lycodon fasciatus</i>	双全链蛇	双全白环蛇
<i>Lycodon fusingensis</i>	福清链蛇	福清白环蛇
<i>Lycodon gongshan</i>	贡山链蛇	贡山白环蛇
<i>Lycodon laoensis</i>	老挝链蛇	老挝白环蛇
<i>Lycodon liuchengchaoi</i>	刘氏链蛇	刘氏白环蛇
<i>Lycodon multizonatus</i>	横纹链蛇	横纹白环蛇
<i>Lycodon ruhstrati</i>	黑背链蛇	黑背白环蛇
<i>Lycodon septentrionalis</i>	北链蛇	白链蛇
<i>Lycodon subcinctus</i>	细白链蛇	细白环蛇
<i>Lycodon synaptor</i>	东川链蛇	东川白环蛇
<i>Myrrophis bennettii</i>	黑斑沼蛇	黑斑水蛇
<i>Myrrophis chinensis</i>	中国沼蛇	中国水蛇
<i>Oreocryptophis porphyraceus</i>	紫灰蛇	紫灰锦蛇
<i>Orientocoluber spinalis</i>	黄脊东方蛇	黄脊游蛇
<i>Platyceps rhodorachis</i>	简氏红鞭蛇	红脊扁头蛇
<i>Popeia popeorum</i>	坡普蝮	坡普竹叶青蛇
<i>Subessor bocourti</i>	腹斑蛇	腹斑水蛇
<i>Thermophis baileyi</i>	温泉蛇	西藏温泉蛇
<i>Viridovipera gumprechtii</i>	冈氏绿蝮	冈氏竹叶青蛇
<i>Viridovipera medoensis</i>	墨脱绿蝮	墨脱竹叶青蛇
<i>Viridovipera stejnegeri</i>	福建绿蝮	福建竹叶青蛇
<i>Viridovipera yunnanensis</i>	云南绿蝮	云南竹叶青蛇
<i>Xenochrophis flavipunctatus</i>	黄斑异色蛇	黄斑渔游蛇
<i>Xenochrophis piscator</i>	异色蛇	渔游蛇

蛇”恢复为“绿锦蛇”、*G. frenatum*由“灰腹绿蛇”恢复为“灰腹绿锦蛇”，*Euprepiophis mandarinus*由“玉斑蛇”恢复为“玉斑锦蛇”、*Euprepiophis perlaceus*由“横纹玉斑蛇”恢复为“横斑锦蛇”，*Oreocryptophis porphyraceus*由“紫灰蛇”恢复为“紫灰锦蛇”，而对于蔡波等(2015)名录中收录的广义锦蛇属中剩余有效属的中文名称，则在此保留，即“紫灰蛇属”*Oreocryptophis*和“玉斑蛇属”*Euprepiophis*；将*Hemorrhais ravergeri*中文名由“秘纹蛇”恢复为“花脊游蛇”；将*Orientocoluber spinalis*中文名由“黄脊东方蛇”恢复为“黄脊游蛇”；在保留蔡波等(2015)使用的属中文名的情况下，将原广义竹叶青属*Trimeresurus sensu lato*物种统一恢复为原惯用中文名，即将*Viridovipera medoensis*中文名由“墨脱绿蝮”恢复为“墨脱竹叶青蛇”，由*V. yunnanensis*由“云南绿蝮”恢复为“云南竹叶青蛇”、*V. stejnegeri*由“福建绿蝮”恢复为“福建竹叶青蛇”、*Himalayophis tibetanus*由“西藏喜山蝮”恢复为“西藏竹叶青蛇”；将*Myrrophis chinensis*由“中国沼蛇”恢复为“中国水蛇”、*M. bennettii*由“黑斑沼蛇”恢复为“黑斑水蛇”、*Hypsiscopus plumbea*由“铅色蛇”恢复为“铅色水蛇”、*Subsessor bocourti*由“腹斑蛇”恢复为“腹斑水蛇”；将*Eremias quadrifrons*的中文名恢复为先前文献中惯用的“四额鳞麻蜥”(表10)。

对于白环蛇属近期发现或恢复有效性的物种、由于*Lycodon multizonatus*的原惯用中文名“横纹小头蛇”与现小头蛇属(*Oligodon*)物种易发生混淆，故建议修改为“横纹白环蛇”；而剩余未有惯用中文名的物种，为保持该属中文名最大程度一致性，建议对其中文名做出修改，即将*Lycodon futsingensis*由“福清链蛇”修改为“福清白环蛇”、*Lycodon gongshan*中文名由“贡山链蛇”修改为“贡山白环蛇”、*Lycodon liuchengchaoi*由“刘氏链蛇”修改为“刘氏白环蛇”、*Lycodon synaptor*由“东川链蛇”修改为“东川白环蛇”。类似地，对于广义竹叶青属中先前中文文献中未做记载的*Viridovipera gumprechtii*和*Popeia popeorum*，中文名则分别由“冈氏绿蝮”和“坡普蝮”更改为“冈氏竹叶青蛇”和“坡普竹叶青蛇”；对于*Sinovipera sichuanensis*则遵从原文，保留其物种中文名，即“四川华蝮”(表5)。

对于近期高阶元分类变动的类群，对于以往文献中存在惯用名称的，采纳以往惯用名称：*Japalura*

中文名沿用“攀蜥属”，而主要分布于我国西南地区及台湾岛的*Diploderma*中文名则使用先前使用的“龙蜥属”(赵尔宓等, 1999; 赵尔宓, 2004); 相应地，其属内对应物种的中文名也做出了改变；*Pseudoagkistrodon*的中文名沿用其次定同物异名*Macropisthodon*在中文文献中的名称“颈棱蛇属”(赵尔宓等, 1998; 赵尔宓, 2004, 2006)，而*P. rudis*中文名亦保留“颈棱蛇”；新属*Smithophis*此前被误定为*Rhabdops*，故沿用后者的中文名，而*Rhabdops*的中文名在以往文献中不统一，或“杆蛇属”(赵尔宓等, 1993)、或“黄腹杆蛇属”(赵尔宓等, 1998; 赵尔宓, 2006; 蔡波等, 2015)，然而后者的“黄腹”一词既无语源学支持，又对该属的鉴别无特殊意义，故本文采纳前者，将*Smithophis*中文名修改为“杆蛇属”，而该类群在我国所涉及物种*Smithophis bicolor*的中文名保持不变，即“黄腹杆蛇”；对于新划入树蜥属的*Calotes paulus*，其中文名保持不变，即“异鳞蜥”。

对于分类变动时已明确给出中文名修改建议的，则采纳文献意见：*Trimerodytes*中文名采用“环游蛇属”，其属内除模式种外的其他物种中文名保持不变，而其模式种*Trimerodytes balteatus*中文名修改为“横纹环游蛇”(Ren et al, 2019)(表1, 2)。

3 小结及展望

2015–2019年中国两栖、爬行动物累计新发现描述和恢复有效性的两栖动物共计74种、爬行动物42种。整体来看，新物种描述的数量随着新技术手段的运用及分类工作的系统开展呈逐年稳定增加的态势(王凯和蒋珂, 2016; 王凯和陈宏满, 2017; 王凯等, 2018, 2019a)，提示我国两栖爬行动物多样性仍处于被低估的状态。

在此次名录整理过程中发现，以下四方面问题较为突出，值得关注：(1)部分“广布种”实际上由多个隐存物种组成，形态上较为保守而缺少研究，这一现象在部分类群中较为普遍，如角蟾属(Chen JM et al, 2017; Wang J et al, 2017, 2019c; Yang et al, 2018a; Wang L et al, 2019)、掌突蟾属(Yang et al, 2016b, 2018b; Chen JM et al, 2018; Yuan et al, 2017; Wang J et al, 2018a)、亚洲蝮属(史静耸等, 2016; Shi et al, 2017, 2018; Wang K et al, 2019e)和龙蜥属(Wang K et al, 2015, 2016, 2019d, 2019f; 王凯等, 2019b)等；(2)部分研究发现，同属物种同域分布的

现象也比较突出(Chen JM et al, 2017, 2018), 建议开展深入的整合研究, 包括基础生态学数据收集(鸣声数据、繁殖行为等)和DNA遗传学数据的整合分析, 以有助于加深对物种成种机制的理解; (3)鉴于我国西南边境省份或自治区(如云南、西藏及广西; 表5, 8)持续发现已知物种的新纪录, 建议加强我国边境地区的调查研究, 开展跨境、跨区域比较研究工作; (4)部分依据早期文献的物种纪录明显存疑, 但由于缺乏关注或存在客观困难(如模式产地或模式标本遗失或未知), 长期未得到确认与解决, 建议在后期工作中得到加强: 其中部分物种在以往及本名录中已有收录, 如记录于我国海南的长棘蜥(*Acanthosaura armata*) (赵尔宓等, 1999; 史海涛等, 2011)及记录于香港的侏蜥(*Lygosoma bowringii*) (赵尔宓等, 1999), 而另一部分物种仅在早期文献中有过记录, 但后期名录中长期未做收录或讨论(赵尔宓等, 1998, 1999; 赵尔宓, 2006; 蔡波等, 2015), 本名录也暂未收录, 如黄腹颈槽蛇(*Rhabdophis chrysargos*) (Boulenger, 1893; Pope, 1935)、敦煌沙蚺(*Eryx dunhuangensis*) (李胜忠和王国英, 1989)以及爪哇蝮蜥(*Lygosoma quadrupes*) (Smith, 1935; Geisler et al, 2011; Siler et al, 2018)。

除上述物种阶元的分类变动外, 整体上两栖爬行动物高级分类阶元的变动也较为频繁, 特别是部分科、属阶元的分类划分仍存在争议。随着研究的不断推进, 本文所总结整理的部分分类体系在将来也会面临进一步的变动。对于今后针对高阶元分类的研究, 我们建议: (1)充分考虑目前系统学研究进展, 在遵循分类单系性原则的基础上, 综合考虑形态鉴别及分类的可操作性; (2)在系统学研究中, 充分考虑我国物种在国外的近缘类群, 尤其是关键科、属、种的模式代表, 以形成对中国分布物种类群更全面、正确的系统演化关系的认识; (3)在系统发育关系未得到解决的情况下, 不建议对属级及以上的高阶元分类进行变动, 而以分子数据为基础进行系统发育关系构建时, 应结合核基因的多基因片段开展研究; (4)高阶元分类发生变动时, 各分类阶元中文名应最大程度保持稳定, 特别是物种中文名, 不建议跟随高阶元分类变动而发生频繁改变。

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参考文献

- Agarwal I, Mahony S, Giri VB, Chaitanya R, Bauer AM (2018) Two new species of bent toed geckos, *Cyrtodactylus* Gray, 1827 (Squamata: Gekkonidae) from Northeast India with comments on name-bearing types from the region. *Zootaxa*, 4420, 334–356.
- Annandale N (1908) Description of a new species of lizard of the genus *Salea* from Assam. *Records of the Indian Museum* 2, 37–38.
- AmphibianWeb (2015) University of California, Berkeley, CA, USA. <http://amphibiaweb.org>. (accessed 2015-12-31)
- Bauer AM, Masroor R, Titus-McQuillan J, Heinicke MP, Daza JD, Jackman TR (2013) A preliminary phylogeny of the Palearctic naked-toed geckos (Reptilia: Squamata: Gekkonidae) with taxonomic implications. *Zootaxa*, 3599, 301–324.
- Bhosale HS, Gowande GG, Mirza ZA (2019) A new species of fossorial natricid snakes of the genus *Trachischium* Günther, 1858 (Serpentes: Natricidae) from the Himalayas of northeastern India. *Comptes Rendus Biologies*, 342, 323–329.
- Böhme W (2003) Checklist of the living monitor lizards of the world (family Varanidae). *Zoologische Verhandelingen*, 341, 3–43.
- Böhme W, Ziegler T (1997) On the synonymy and taxonomy of the Bengal monitor lizard, *Varanus bengalensis* (Daudin, 1802) complex (Sauria: Varanidae). *Amphibia-Reptilia*, 18, 207–211.
- Boulenger GA (1893) Catalogue of the snakes in the British Museum (Natural History). Order of the Trustees, London.
- Burbrink FT, Grazziotin FG, Pyron RA, Cundall D, Donnellan S, Irish F, Keogh JS, Kraus F, Murphy RW, Noonan B, Raxworthy CJ, Ruane S, Lemmon AR, Lemmon EM, Zaher H (2019) Interrogating genomic-scale data for Squamata (lizards, snakes, and amphisbaenians) shows no support for key traditional morphological relationships. *Systematic Biology*, syz062, <https://doi.org/10.1093/sysbio/syz062>.
- Cai B, Wang YZ, Chen YY, Li JT (2015) A revised taxonomy for Chinese reptiles. *Biodiversity Science*, 23, 365–382. (in Chinese with English abstract) [蔡波, 王跃招, 陈跃英, 李家堂 (2015) 中国爬行动物分类厘定. *生物多样性*, 23, 365–382.]
- Captain A, Deepak V, Pandit R, Bhatt B, Athreya R (2019) A new species of pitviper (Serpentes: Viperidae: *Trimeresurus* Lacepède, 1804) from West Kameng District, Arunachal Pradesh, India. *Russian Journal of Herpetology*, 26, 111–122.
- Chen JM, Zhou WW, Poyarkov NA, Stuart BL, Brown RM,

- Lathrop A, Wang YY, Yuan ZY, Jiang K, Hou M, Chen HM, Suwannapoom C, Nguyen SG, Duong TV, Papenfuss TJ, Murphy RW, Zhang YP, Che J (2017) A novel multilocus phylogenetic estimation reveals unrecognized diversity in Asian horned toads, genus *Megophrys* sensu lato (Anura: Megophryidae). *Molecular Phylogenetics and Evolution*, 106, 28–43.
- Chen JM, Poyarkov NA, Suwannapoom C, Lathrop A, Wu YH, Zhou WW, Yuan ZY, Jin JQ, Chen HM, Liu HQ, Nguyen TQ, Nguyen SN, Duong TV, Eto K, Nishikawa K, Matsui M, Orlov NL, Stuart BL, Brown RM, Rowley JJ, Murphy RW, Wang YY, Che J (2018) Large-scale phylogenetic analyses provide insights into unrecognized diversity and historical biogeography of Asian leaf-litter frogs, genus *Leptolalax* (Anura: Megophryidae). *Molecular Phylogenetics and Evolution*, 124, 162–171.
- Chen WC, Bei YJ, Liao XW, Zhou SC, Mo YM (2018) A new species of *Gracixalus* (Anura: Rhacophoridae) from West Guangxi, China. *Asian Herpetological Research*, 9, 74–84.
- Chen WC, Liao XW, Zhou SC, Mo YM (2019) A new species of *Leptobranchella* (Anura: Megophryidae) from southern Guangxi, China. *Zootaxa*, 4563, 67–82.
- Chen X, McKelvy AD, Grismer LL, Matsui M, Nishikawa K, Burbrink F (2014) The phylogenetic position and taxonomic status of the Rainbow Tree Snake *Gonyophis margaritatus* (Peters, 1871) (Squamata: Colubridae). *Zootaxa*, 3881, 532–548.
- Chen X, Lemmon AR, Lemmon EM, Pyron RA, Burbrink FT (2017) Using phylogenomics to understand the link between biogeographic origins and regional diversification in ratsnakes. *Molecular Phylogenetics and Evolution*, 111, 206–218.
- Chen ZN, Zhang L, Shi JS, Tang YZ, Guo YH, Song ZB, Ding L (2019) A new species of the genus *Trimeresurus* from Southwest China (Squamata: Viperidae). *Asian Herpetological Research*, 10, 13–23.
- Chirikova MA, Dujsebajeva TN, Liu J, Guo X (2019) Geographical distribution and morphological variability of the Rapid Racerunner, *Eremias velox* (Pallas, 1771) (Reptilia, Lacertidae) in the eastern periphery of its range. *Asian Herpetological Research*, 10, 230–245.
- Dai X, Wang YZ, Zeng XM (2001) Brief review on taxonomy of *Eremias* in China. *Sichuan Journal of Zoology*, 20, 135–138. (in Chinese with English abstract) [戴鑫, 王跃招, 曾晓茂 (2001) 中国麻蜥属分类历史简述. *四川动物*, 20, 135–138.]
- David P, Agarwal I, Athreya R, Mathew R, Vogel G, Mistry VK (2015) Revalidation of *Natrix clerki* Wall, 1925, an overlooked species in the genus *Amphiesma* Duméril, Bibron & Duméril, 1854 (Squamata: Natricidae). *Zootaxa*, 3919, 375–395.
- Denzer W, Manthey U, Campbell PD (2019) Catalogue of type specimens of the agamid lizard genus *Japalura* s. l. (Squamata: Agamidae: Draconinae). *Zootaxa*, 4612, 109–125.
- Dever AJ, Fuiten AM, Konu O, Wilson JA (2012) Cryptic Torrent Frogs of Myanmar: An examination of the *Amolops marmoratus* species complex with the resurrection of *Amolops afghanus* and the identification of a new species. *Copeia*, 1, 57–76.
- Fei L, Ye CY, Huang YZ (1990) Key to Chinese Amphibia. Scientific and Technological Literature Press, Chongqing. (in Chinese) [费梁, 叶昌媛, 黄永昭 (1990) 中国两栖动物检索. 科学技术文献出版社, 重庆.]
- Fei L, Hu SQ, Ye CY et al (2006) Fauna Sinica Amphibia (Vol. 1): General Accounts of Amphibia, Gymnophiona, and Caudata. Science Press, Beijing. (in Chinese) [费梁, 叶昌媛, 黄永昭等 (2006) 中国动物志·两栖纲(第一卷): 总论 蚓螈目 有尾目. 科学出版社, 北京.]
- Fei L, Ye CY, Jiang JP (2012) Colored Atlas of Chinese Amphibians and Their Distributions. Sichuan Publishing House of Science & Technology, Chengdu. (in Chinese) [费梁, 叶昌媛, 江建平 (2012) 中国两栖动物及其分布彩色图鉴. 四川科学技术出版社, 成都.]
- Fei L, Ye CY, Wang YF, Jiang K (2017) A new species of the genus *Amolops* (Anura: Ranidae) from high-altitude Sichuan, southwestern China, with a discussion on the taxonomic status of *Amolops kangtingensis*. *Zoological Research*, 38, 138–145.
- Figuroa A, McKelvy AD, Grismer LL, Bell CD, Lailvaux SP (2016) A species-level phylogeny of extant snakes with description of a new colubrid subfamily and genus. *PLoS ONE*, 11, e0161070.
- Frost DR (2015) Amphibian Species of the World: An Online Reference. American Museum of Natural History, New York, USA. <http://research.amnh.org/herpetology/amphibia/index.html>. (accessed on 2015-12-31)
- Geissler P, Nguyen TQ, Phung TM, Van Devender RW, Hartmann T, Farkas B, Ziegler T, Böhme W (2011) A review of Indochinese skinks of the genus *Lygosoma* Hardwocke & Gray, 1872 (Squamata: Scincidae), with natural history notes and an identification key. *Biologia*, 66, 1159–1176.
- Giri VB, Chaitanya R, Mahony S, Lalrounga S, Lalrinchhana C, Das A, Sarkar V, Karanth P, Deepak V (2019a) On the systematic status of the genus *Oriocalotes* Günther, 1864 (Squamata: Agamidae: Draconinae) with the description of a new species from Mizoram State, Northeast India. *Zootaxa*, 4638, 451–484.
- Giri VB, Gower DJ, Das A, Lalremsanga HT, Lalrounga S, Captain A, Deepak V (2019b) A new genus and species of natricine snake from northeast India. *Zootaxa*, 4603, 241–264.
- Grismer LL, Wood PL Jr, Anuar S, Muin MA, Quah ESH, McGuire JA, Brown RM, Tri NV, Thai PH (2013) Integrative taxonomy uncovers high levels of cryptic

- diversity in *Hemiphyllodactylus* Bleeker, 1860 (Squamata: Gekkonidae) and the description of a new species from Peninsular Malaysia. *Zoological Journal of the Linnean Society*, 169, 849–880.
- Guo KJ, Deng XJ, Zhao DD, Xiong JW, Zhu XL, Chen GY, Chen SD (2018) First record of the genus *Platyceps* Blyth, 1860 from China (Serpentes, Colubridae, Colubrinae). *Journal of Sichuan Normal University (Natural Science)*, 41, 677–680. (in Chinese with English abstract) [郭克疾, 邓学建, 赵东东, 熊嘉武, 朱雪林, 陈贵英, 陈顺德 (2018) 中国蛇类新记录属——红鞭蛇属 *Platyceps* Blyth, 1860 (Serpentes, Colubridae, Colubrinae). *四川师范大学学报 (自然科学版)*, 41, 677–680.]
- Guo P, Liu SY, Feng JZ, He M (2008) The description of a new species of *Thermophis* (Serpentes, Colubridae). *Sichuan Journal of Zoology*, 27, 321. (in Chinese with English abstract) [郭鹏, 刘少英, 冯今朝, 何苗 (2008) 温泉蛇属 *Thermophis* 一新种——四川温泉蛇. *四川动物*, 27, 321.]
- Guo P, Wang YZ (2011) A new genus and species of cryptic Asian green pitviper (Serpentes: Viperidae: Crotalinae) from Southwest China. *Zootaxa*, 2918, 1–14.
- Guo P, Liu Q, Zhong GH, Zhu F, Yan F, Tang T, Xiao R, Fang M, Wang P, Fu X (2015) Cryptic diversity of green pitvipers in Yunnan, South-west China (Squamata, Viperidae). *Amphibia-Reptilia*, 36, 265–276.
- Guo P, Zhu F, Liu Q (2019) A new species of the genus *Sinonatrix* (Serpentes: Colubridae) from western China. *Zootaxa*, 4623, 535–544.
- Guo WB, Zhou KY, Yan J, Li P (2015) A new species of *Hemiphyllodactylus* Bleeker, 1860 (Squamata: Gekkonidae) from western Yunnan, China. *Zootaxa*, 3974, 377–390.
- Guo XG, Chen DL, Wan HF, Wang YZ (2010) Review of systematics on the racerunner lizard (Lacertidae: *Eremias*). *Sichuan Journal of Zoology*, 29, 665–672. (in Chinese with English abstract) [郭宪光, 陈达丽, 万宏富, 王跃招 (2010) 麻蜥属 *Eremias* 的系统学研究进展. *四川动物*, 29, 665–672.]
- Herpetological Department, Sichuan Biological Research Institute (1977) Retrieval of Chinese Reptile Taxonomy. Science Press, Beijing. (in Chinese) [四川省生物研究所两栖爬行动物研究室 (1977) 中国爬行动物系统检索. 科学出版社, 北京.]
- Hou M, Yu GH, Chen HM, Liao CL, Zhang L, Chen J, Li PP, Orlov NL (2017) The taxonomic status and distribution range of six *Theloderma* species (Anura: Rhacophoridae) with a new record in China. *Russian Journal of Herpetology*, 24, 99–127.
- Hou YM, Zhang MF, Hu F, Li SY, Shi SC, Chen J, Mo XY, Wang B (2018) A new species of the genus *Leptolalax* (Anura, Megophryidae) from Hunan, China. *Zootaxa*, 4444, 247–266.
- Hu XL (2007) The movements patterns and habitat selection of the Tibetan Hot Spring Snake. *Journal of Tibetan University*, 2, 77–83. (in Chinese with English abstract) [胡晓林 (2007) 西藏温泉蛇的活动规律和栖息地选择. *西藏大学学报汉文版*, 2, 77–83.]
- Hui H, Yu GH, Yang JX, Rao DQ (2019) First record of *Minervarya chiangmaiensis* (Anura: Dicroglossidae) from China and Myanmar. *Russian Journal of Herpetology*, 26, 261–266.
- International Commission on Zoological Nomenclature (1999) International Code of Zoological Nomenclature. International Trust of Zoological Nomenclature, London.
- Jaeger EC (translated by Teng DP, Jiang ZY) (1965) A Source-book of Biological Names and Terms. Science Press, Beijing. (in Chinese) [滕砥平, 蒋芝英 (译) (1965) 生物名称和生物学术语的词源. 科学出版社, 北京.]
- Jiang DC, Jiang K, Ren JL, Wu J, Li JT (2019) Resurrection of the genus *Leptomantis*, with description of a new genus to the family Rhacophoridae (Amphibia: Anura). *Asian Herpetological Research*, 10, 1–12.
- Jiang K, Wang K, Yang JX, Jin JQ, Zou DH, Yan F, Pan HJ, Che J (2016) Three new records of Amphibia from Tibet, China. *Sichuan Journal of Zoology*, 35, 210–216. (in Chinese with English abstract) [蒋珂, 王凯, 杨军校, 金洁琼, 邹大虎, 颜芳, 潘虎君, 车静 (2016) 西藏两栖纲新纪录2种及缅甸树蛙描述. *四川动物*, 35, 210–216.]
- Jiang K, Wang K, Yan F, Xie J, Zou DH, Liu WL, Jiang JP, Li C, Che J (2016a) A new species of the genus *Amolops* (Amphibia: Ranidae) from southeastern Tibet, China. *Zoological Research*, 37, 31–40.
- Jiang K, Wang K, Zou DH, Yan F, Li PP, Che J (2016b) A new species of the genus *Scutigera* (Anura: Megophryidae) from Medog of southeastern Tibet, China. *Zoological Research*, 37, 21–30.
- Jiang K, Yan F, Wang K, Zou DH, Li C, Che J (2016c) A new genus and species of treefrog from Medog, southeastern Tibet, China (Anura, Rhacophoridae). *Zoological Research*, 37, 15–20.
- Jiang K, Wang K, Wang YF, Li C, Che J (2019) A new species of the endemic Himalayan genus *Liurana* (Anura, Ceratobatrachidae) from southeastern Tibet, China, with comments on the distribution, reproductive biology, and conservation of the genus. *Zoological Research*, 40, 175–184.
- Jiang Y, Wei ZM, Han FY, Ni QY, Yao YF, Xu HL, Li Y, Rao DQ, Zhang MW (2017) The complete mitogenome sequence of *Tylototriton zieglerei* (Amphibia: Caudata). *Conservation Genetics Resources*, 9, 503–506.
- Jin YT, Yang ZS, Brown RP, Liao PH, Liu NF (2014) Intraspecific lineages of the lizard *Phrynocephalus putjatia* from the Qinghai-Tibetan Plateau: Impact of physical events on divergence and discordance between morphology and

- molecular markers. *Molecular Phylogenetics and Evolution*, 71, 288–297.
- Jin YT, Brown RP (2019) Morphological species and discordant mtDNA: A genomic analysis of *Phrynocephalus* lizard lineages on the Qinghai-Tibetan Plateau. *Molecular Phylogenetics and Evolution*, 139, 106523.
- Ji LQ, et al (2019) China Checklist of Animals. In: Catalogue of Life China: 2018 Annual Checklist (ed. Biodiversity Committee of Chinese Academy of Sciences), Beijing, China. (<http://www.sp2000.org.cn>)
- Kunte K, Manthey U (2009) Wiederentdeckung von *Japalura sagittifera* (Sauria: Agamidae) in Arunachal Pradesh, Ost-Himalaya: Ein Erstnachweis für die indische Herpetofauna. *Sauria*, 31, 49–55.
- Kurita K, Ota H, Hikida T (2017a) A new species of *Plestiodon* (Squamata: Scincidae) from the Senkaku Group, Ryukyu Archipelago, Japan. *Zootaxa*, 4254, 520–536.
- Kurita K, Nakamura Y, Okamoto T, Lin S, Hikida T (2017b) Taxonomic reassessment of two subspecies of Chinese skink in Taiwan based on morphological and molecular investigations (Squamata, Scincidae). *ZooKeys*, 131–148.
- Li C, Yuan ZY, Li HB, Wu YK (2018) The tenth member of Stout Newt (Amphibia: Salamandridae: *Pachytriton*): Description of a new species from Guangdong, southern China. *Zootaxa*, 4399, 207–219.
- Li J (2007) Discussion of food and eating habit. *Journal of Tibetan University*, 2, 84–90. (in Chinese with English abstract) [李建 (2007) 中国特有物种西藏温泉蛇的食性及取食行为. *西藏大学学报(汉文版)*, 2, 84–90]
- Li SZ, Wang GY (1989) A study of classification and distribution of *Eryx* in China. *Journal of August First Agricultural College*, 12, 48–56. (in Chinese with English abstract) [李胜忠, 王国英 (1989) 中国沙蜥属的分类研究. *八一农学院学报*, 12, 48–56.]
- Li SZ, Xu N, Lv JC, Jiang JP, Wei G, Wang B (2018a) A new species of the odorous frog genus *Odorrana* (Amphibia, Anura, Ranidae) from southwestern China. *PeerJ*, 6, e5695.
- Li SZ, Xu N, Liu J, Jiang JP, Wei G, Wang B (2018b) A new species of the Asian toad genus *Megophrys* sensu lato (Amphibia: Anura: Megophryidae) from Guizhou Province, China. *Asian Herpetological Research*, 9, 224–239.
- Li SZ, Wei G, Xu N, Cui JG, Fei L, Jiang JP, Liu J, Wang B (2019a) A new species of the Asian music frog genus *Nidirana* (Amphibia, Anura, Ranidae) from Southwestern China. *PeerJ*, 7, e7157.
- Li SZ, Zhang MH, Xu N, Lv JC, Jiang JP, Liu J, Wei G, Wang B (2019b) A new species of the genus *Microhyla* (Amphibia: Anura: Microhylidae) from Guizhou Province, China. *Zootaxa*, 4624, 551–575.
- Liang XX, Liu WL, Wang B, Ding L, Wu JP, Xie F, Jiang JP (2017) *Leptobrachium bompu* (Amphibia, Anura, Megophryidae) discovered in upper Medog, Tibet, China, with descriptions of its tadpoles, advertisement calls and systematic position. *Asian Herpetological Research*, 8, 137–146.
- Lin J, Yao C (2016) A new species of the genus *Geckko* (Squamata: Sauria: Gekkonidae) from Guishan Isle, Yilan County, Taiwan. *Journal of the National Taiwan Museum*, 69, 1–14.
- Lin L, Sun L, Wang W, Shi HT (2018) Taxonomic status and nomenclature of Four Eye-spotted Turtle from Hainan Island. *Sichuan Journal of Zoology*, 37, 435–438. (in Chinese with English abstract) [林柳, 孙亮, 王伟, 史海涛 (2018) 海南四眼斑水龟的分类地位与命名. *四川动物*, 37, 435–438.]
- Liu BQ, Wang YF, Jiang K, Chen HM, Zhou JJ, Xu JN, Wu CH (2017) A new species of the genus *Rhacophorus* found in Zhejiang, China (Anura: Rhacophoridae). *Chinese Journal of Zoology*, 52, 361–372. (in Chinese with English abstract) [刘宝权, 王聿凡, 蒋珂, 陈宏满, 周佳俊, 许济南, 吴丞昊 (2017) 中国浙江发现树蛙属一新种(两栖纲: 树蛙科). *动物学杂志*, 52, 361–372.]
- Liu Q, Zhong GH, Wang P, Liu Y, Guo P (2018) A new species of the genus *Hebius* (Squamata: Colubridae) from Sichuan, China. *Zootaxa*, 4483, 385–394.
- Liu JL, Guo XG, Chen DL, Li J, Yue BS, Zeng XM (2019) Diversification and historical demography of the Rapid Racerunner (*Ememias velox*) in relation to geological history and Pleistocene climate oscillation in arid central Asia. *Molecular Phylogenetics and Evolution*, 130, 244–258.
- Liu S, Rao DQ (2019) A new species of the genus *Acanthosaura* from Yunnan, China (Squamata, Agamidae). *Zookey*, 888, 105–132.
- Lu LL, Lv ZT, Wang J, Wang YY (2016) First record and re-description of *Odorrana yentuensis* from China. *Chinese Journal of Wildlife*, 37, 390–394. (in Chinese with English abstract) [卢琳琳, 吕植桐, 王健, 王英永 (2016) 安子山臭蛙(*Odorrana yentuensis*)的中国新分布纪录及其补充描述. *野生动物学报*, 37, 390–394.]
- Lyu ZT, Zeng ZC, Wang J, Lin CY, Liu ZY, Wang YY (2017) Resurrection of genus *Nidirana* (Anura: Ranidae) and synonymizing *N. caldwelli* with *N. adenopleura*, with description of a new species from China. *Amphibia-Reptilia*, 38, 483–502.
- Lyu ZT, Wu J, Wang J, Sung YH, Liu ZY, Zeng ZC, Wang X, Li YY, Wang YY (2018) A new species of *Amolops* (Anura: Ranidae) from southwestern Guangdong, China. *Zootaxa*, 4418, 562–576.
- Lyu ZT, Huang LS, Wang J, Li YQ, Chen HH, Qi S, Wang YY (2019a) Description of two cryptic species of the *Amolop sricketti* group (Anura, Ranidae) from southeastern China. *ZooKeys*, 812, 133–156.
- Lyu ZT, Mo YM, Wan H, Li YL, Pang H, Wang YY (2019b) Description of a new species of Music frogs (Anura, Ranidae, *Nidirana*) from Mt. Dayao, southern China. *ZooKeys*, 858,

- 109–126.
- Lyu ZT, Zeng ZC, Wan H, Yang JH, Li YL, Pang H, Wang YY (2019c) A new species of *Amolops* (Anura: Ranidae) from China, with taxonomic comments on *A. liangshanensis* and Chinese populations of *A. marmoratus*. *Zootaxa*, 4609, 247–268.
- Macey JR, Schulte JA II, Larson A, Ananjeva NB, Wang Y, Pethiyagoda R, Rastegar-Pouyani N, Papenfuss TJ (2000) Evaluating trans-tethys migration: An example using acrodont lizards phylogenetics. *Systematic Biology*, 49, 233–256.
- Mahony S (2010) Systematic and taxonomic reevaluation of four little known Asian agamid species, *Calotes kingdonwardi* Smith, 1935, *Japalura kaulbacki* Smith, 1937, *Salea kakhienensis* Anderson, 1879 and the monotypic genus *Mictopholis* Smith, 1935 (Reptilia: Agamidae). *Zootaxa*, 2514, 1–23.
- Mahony S, Foley NM, Biju SD, Teeling EC (2017) Evolutionary history of the Asian horned frogs (Megophryinae): Integrative approaches to timetree dating in the absence of a fossil record. *Molecular Biology and Evolution*, 34, 744–771.
- Manthey U (2010) Agamid Lizards of Southern Asia—Dracoinae 2, Leiopelidinae. Chimaira, Hesse.
- Melville J, Hale J, Mantziou G, Ananjeva NB, Milto K, Clemann N (2009) Historical biogeography, phylogenetic relationships and intraspecific diversity of agamid lizards in the Central Asian deserts of Kazakhstan and Uzbekistan. *Molecular Phylogenetics and Evolution*, 53, 99–112.
- Messenger K, Dahn H, Liang Y, Xie P, Wang Y, Lu C (2019) A new species of the genus *Megophrys* Günther, 1864 (Amphibia: Anura: Megophryidae) from Mount Wuyi, China. *Zootaxa*, 4554, 561–583.
- Mo YM, Chen WC, Wu H, Zhang W, Zhou SC (2015) A new species of *Odorrana* inhabiting complete darkness in a karst cave in Guangxi, China. *Asian Herpetological Research*, 6, 11–17.
- Mo YM, Chen WC, Liao XW, Zhou SC (2016) A new species of the genus *Rhacophorus* (Anura: Rhacophoridae) from Southern China. *Asian Herpetological Research*, 7, 139–150.
- Murphy JC, Chan-ard T, Mekchai S, Cota M, Voris HK (2008) The rediscovery of Angel's Stream Snake, *Paratapinophis praemaxillaris* Angel, 1929 (Reptilia: Serpentes: Natricidae). *The Natural History Journal of Chulalongkorn University*, 8, 169–183.
- Nicodemo P, Bain RH (2007) Geographic distribution note on *Dendrelaphis ngansonensis* in China. *Herpetological Review*, 38, 355.
- Nishikawa K, Rao D, Matsui M, Eto K (2015) Taxonomic relationship between *Tylotriton daweishanensis* Zhao, Rao, Liu, Li and Yuan, 2012 and *T. yangi* Hou, Li and Lu, 2012 (Amphibia: Urodela: Salamandridae). *Current Herpetology*, 34, 67–74.
- Ohler A, Deuti K (2018) *Polypedates smaragdinus* Blyth, 1852 a senior subjective synonym of *Rhacophorus maximus* Günther, 1858. *Zootaxa*, 4375, 273–280.
- Oliver AL, Prendini E, Kraus F, Raxworthy CJ (2015) Systematics and biogeography of the *Hylarana* frog (Anura: Ranidae) radiation across tropical Australasia, Southeast Asia, and Africa. *Molecular Phylogenetics and Evolution*, 90, 176–192.
- Orlov NL, Barabanov AV (2000) About the type localities for some species of the genus *Gloydus* Hoge et Romano-Hode, 1981 (Crotalinae: Viperidae: Serpentes). *Russian Journal of Herpetology*, 7, 159–160.
- Ota H (2000) *Japalura szechwanensis*, a junior synonym of *J. fasciata*. *Journal of Herpetology*, 4, 611–614.
- Pan T, Zhang YN, Wang H, Wu J, Kang X, Qian LF, Li K, Zhang Y, Chen JY, Rao DQ, Jiang JP, Zhang B (2017) A new species of the genus *Rhacophorus* (Anura: Rhacophoridae) from Dabie Mountains in East China. *Asian Herpetological Research*, 8, 1–13.
- Peng LF, Wang LJ, Ding L, Zhu YW, Luo J, Yang DC, Huang RY, Lu SQ, Huang S (2018) A new species of the genus *Sinomicrosaurus* Slowinski, Boundy and Lawson, 2001 (Squamata: Elapidae) from Hainan Province, China. *Asian Herpetological Research*, 9, 65–73.
- Pham TC, Nguyen TQ, Nguyen TT, Nguyen TV, Orlov NL, van Schingen M, Ziegler T (2018) First record of *Liuixalus feii* Yang, Rao et Wang, 2015 (Anura: Rhacophoridae) from Vietnam and taxonomic assignment of *L. jinxiuensis* Li, Mo, Xie et Jiang, 2015. *Russian Journal of Herpetology*, 25, 121–125.
- Pope CH (1935) The Reptiles of China. *Natural History of Central Asia*, Vol.10. American Museum of Natural History, New York.
- Pyron RA, Burbrink FT, Wiens JJ (2013) A phylogeny and revised classification of Squamata, including 4161 species of lizards and snakes. *BMC Evolutionary Biology*, 13, 93.
- Purkayastha J, David P (2019) A new species of the snake genus *Hebius* Thompson from Northeast India (Squamata: Natricidae). *Zootaxa*, 4555, 79–90.
- Qi S, Yu GH, Lei B, Fan Y, Zhang DL, Dong ZW, Li PP, Orlov NL, Hou M (2018) First record of *Theioderma gordonii* Taylor, 1962 from Yunnan Province, China. *Russian Journal of Herpetology*, 25, 43–55.
- Qi S, Zhou ZY, Lu YY, Li JL, Qin HH, Hou M, Zhang Y, Ma JZ, Li PP (2019a) A new species of *Nanorana* (Anuran: Dicroglossidae) from southern Tibet, China. *Russian Journal of Herpetology*, 26, 159–174.
- Qi S, Zhou ZY, Lyu ZT, Lu YY, Wan H, Hou M, Guo KJ, Li PP (2019b) Description of a new species of *Amolops* (Anura: Ranidae) from Tibet, China. *Asian Herpetological Research*, 10, 219–229.
- Qian LF, Sun XN, Li JQ, Guo WB, Pan T, Kang X, Wang H, Jiang JP, Wu J, Zhang BW (2017) A new species of the

- genus *Tylotriton* (Amphibia: Urodela: Salamandridae) from the Southern Dabie Mountains in Anhui Province. *Asian Herpetological Research*, 8, 151–164.
- Qin SB, Mo YM, Jiang K, Cai B, Xie F, Jiang JP, Murphy RW, Li JT, Wang YZ (2015) Two new species of *Liuixalus* (Rhacophoridae, Anura): Evidence from morphological and molecular analyses. *PLoS ONE*, 10, e0136134.
- Rao DQ, Yang DT (1996) The preliminary researches on the Varanid species of Yunnan and their habitats, habits and conservational situation *Chinese Biodiversity*, 4, 194–200. (in Chinese with English abstract) [饶定齐, 杨大同 (1996) 云南巨蜥类物种多样性及其生境、习性和现状的初步调查. *生物多样性*, 4, 194–200.]
- Rao DQ, Vindum JV, Ma X, Fu M, Wilkinson JA (2017) A new species of *Japalura* (Squamata, Agamidae) from the Nu River Valley in Southern Hengduan Mountains, Yunnan, China. *Asian Herpetological Research*, 8, 86–95.
- Ren JL, Wang K, Jiang K, Guo P, Li JT (2017) A new species of the Southeast Asian genus *Opisthotropis* (Serpentes: Colubridae: Natricinae) from western Hunan, China. *Zoological Research*, 38, 251–263.
- Ren JL, Wang K, Nguyen TT, Hoang CV, Zhong GH, Jiang K, Guo P, Li JT (2018) Taxonomic re-evaluation of the monotypic genus *Pararhabdophis* Bourret, 1934 (Squamata: Colubridae: Natricinae) with discovery of its type species, *P. chapaensis*, from China. *Zootaxa*, 4486, 31–56.
- Ren JL, Wang K, Guo P, Wang YY, Nguyen TT, Li JT (2019) On the generic taxonomy of *Opisthotropis balteata* (Cope, 1895) (Squamata: Colubridae: Natricinae): Taxonomic revision of two Natricine genera. *Asian Herpetological Research*, 10, 105–128.
- Saikia B, Sinha B, Kharkongor IJ (2017) *Odorrana arunachalensis*: A new species of Cascade Frog (Anura: Ranidae) from Talle Valley Wildlife Sanctuary, Arunachal Pradesh, India. *Journal of Bioresources*, 4, 30–41.
- Sanchez E, Biju SD, Islam MM, Hasan M, Ohler A, Vences M, Kurabayashi A (2018) Phylogeny and classification of Fejervaryan frogs (Anuran: Dicroglossidae). *Salamandra*, 54, 109–116.
- Savage JA (2015) What are the correct family names for the taxa that include the snake genera *Xenodermus*, *Pareas*, and *Calamaria*. *Herpetological Review*, 46, 664–665.
- Sheridan JA, Stuart BL (2018) Hidden species diversity in *Sylvirana nigrovittata* (Amphibia: Ranidae) highlights the importance of taxonomic revisions in biodiversity conservation. *PLoS ONE*, 13, e0192766.
- Shi HT, Zhao EM, Wang LJ et al (2011) *Amphibians and Reptiles of Hainan*. Science Press, Beijing. (in Chinese) [史海涛, 赵尔宓, 王立军 等 (2011) 海南两栖爬行动物志. 科学出版社, 北京.]
- Shi JS, Yang DW, Zhang WY, Qi S, Li PP, Ding L (2016) Distribution and infraspecies taxonomy of *Gloydius halys-Gloydius intermedius* complex in China (Serpentes: Crotalinae). *Chinese Journal of Zoology*, 51, 777–798. (in Chinese with English abstract) [史静聿, 杨登为, 张武元, 齐硕, 李丕鹏, 丁利 (2016) 西伯利亚蝮-中介蝮复合种在中国的分布及种下分类 (蛇亚目: 蝮亚科). *中国动物学杂志*, 51, 777–798.]
- Shi JS, Wang G, Chen XE, Fang YH, Ding L, Huang S, Hou M, Liu J, Li PP (2017) A new moth-preying alpine pit viper species from Qinghai-Tibetan Plateau (Viperidae, Crotalinae). *Amphibia-Reptilia*, 38, 517–532.
- Shi JS, Yang DC, Zhang WY, Peng LF, Orlov NL, Jiang F, Ding L, Hou M, Huang XL, Huang S, Li PP (2018) A new species of the *Gloydius strauchi* complex (Crotalinae: Viperidae: Serpentes) from Qinghai, Sichuan, and Gansu, China. *Russian Journal of Herpetology*, 25, 126–138.
- Siler CD, Heitz BB, Davis D, Freitas ES, Aowphol A, Termprayoon K, Grismer LL (2018) New supple skink, genus *Lygosoma* (Reptilia: Squamata: Scincidae), from Indochina and redescription of *Lygosoma quadrupes* (Linnaeus, 1766). *Journal of Herpetology*, 52, 332–347.
- Smith MA (1935) The fauna of British India, including Ceylon and Burma. Reptiles and Amphibia, Volume II. Sauria. Taylor and Francis, London.
- Smith MA (1943) The fauna of British India, including Ceylon and Burma. Reptiles and Amphibia, Volume III. Serpentes. Taylor and Francis, London.
- Stejneger L (1907) Herpetology of Japan and adjacent territory. *Bulletin of the United States National Museum*, 58, 1–577.
- Sung YH, Hu P, Wang J, Liu HJ, Wang YY (2016) A new species of *Amolops* (Anura: Ranidae) from southern China. *Zootaxa*, 4170, 525–538.
- Sung YH, Lee WH, Ng HN, Zhang YJ, Yang JH (2018) A new species of *Hemiphyllodactylus* (Squamata: Gekkonidae) from Hong Kong. *Zootaxa*, 4392, 361–373.
- Suwannapoom C, Yuan Z, Chen J, Hou M, Zhao H, Wang L, Nguyen T, Nguyen T, Murphy RW, Sullivan J, McLeod DS (2016) Taxonomic revision of the Chinese *Limnonectes* (Anura, Dicroglossidae) with the description of a new species from China and Myanmar. *Zootaxa*, 4093, 181–200.
- Takeuchi H, Savitzky AH, Ding L, de Silva A, Das I, Nguyen TT, Tsai TS, Jono T, Zhu G, Mahaulpatha D (2018) Evolution of nuchal glands, unusual defensive organs of Asian natricine snakes (Serpentes: Colubridae), inferred from a molecular phylogeny. *Ecology and Evolution*, 8, 10219–10232.
- Tapley B, Cutajar T, Mahony S, Nguyen CT, Dau VQ, Nguyen TT, Van Luong H, Rowley JJ (2017) The Vietnamese population of *Megophrys kuatunensis* (Amphibia: Megophryidae) represents a new species of Asian horned frog from Vietnam and southern China. *Zootaxa*, 4344, 465–492.
- Turvey ST, Marr MM, Barnes I, Brace S, Tapley B, Murphy RW, Zhao EM, Cunningham AA (2019) Historical museum

- collections clarify the evolutionary history of cryptic species radiation in the world's largest amphibians. *Ecology and Evolution*, 9, 10070–10084.
- Wallach V, Williams KL, Boundy J (2014) Snakes of the World. A Catalogue of Living and Extinct Species. CRC Press, Boca Raton.
- Wang CC, Qian LF, Zhang CL, Guo WB, Pan T, Wu J, Wang H, Zhang BW (2017) A new species of *Rana* from the Dabie Mountains in eastern China (Anura, Ranidae). *ZooKeys*, 724, 135–153.
- Wang J, Liu Z, Lyu ZY, Zeng ZC, Wang YY (2017) A new species of the genus *Xenophrys* (Amphibia: Anura: Megophryidae) from an offshore island in Guangdong Province, southeastern China. *Zootaxa*, 4324, 541–556.
- Wang J, Yang JH, Li Y, Lyu ZT, Zeng ZC, Liu ZY, Ye YH, Wang YY (2018a) Morphology and molecular genetics reveal two new *Leptobranchella* species in southern China (Anura, Megophryidae). *ZooKeys*, 776, 105–137.
- Wang J, Zeng ZC, Lyu ZT, Liu ZY, Wang YY (2018b) Description of a new species of *Gracixalus* (Amphibia: Anura: Rhacophoridae) from Guangdong Province, southeastern China. *Zootaxa*, 4420, 251–269.
- Wang J, Li Y, Li Y, Chen HH, Zeng Y, Shen JM, Wang YY (2019a) Morphology, molecular genetics, and acoustics reveal two new species of the genus *Leptobranchella* from northwestern Guizhou Province, China (Anura, Megophryidae). *ZooKeys*, 848, 119–154.
- Wang J, Li Y, Zeng ZC, Lyu ZT, Sung YH, Li YY, Lin CY, Wang YY (2019b) A new species of the genus *Achalinus* from southwestern Guangdong Province, China (Squamata: Xenodermatidae). *Zootaxa*, 4674, 471–481.
- Wang J, Lyu ZT, Liu ZY, Liao CK, Zeng ZC, Zhao J, Li YL, Wang YY (2019c) Description of six new species of the subgenus *Panophrys* within the genus *Megophrys* (Anura, Megophryidae) from southeastern China based on molecular and morphological data. *ZooKeys*, 851, 113–164.
- Wang J, Lyu ZT, Yang CY, Li YL, Wang YY (2019d) A new species of the genus *Takydromus* (Squamata, Lacertidae) from southwestern Guangdong, China. *ZooKeys*, 871, 119–139.
- Wang K, Jiang K (2016) Taxonomic Novelty and New Records of Herpetofauna of China in 2015. *AmphibiaChina*. (<http://www.amphibiachina.org/news/scientifictrends/132-2015>. accessed on 2019-02-05) [王凯, 蒋珂 (2016) 2015中国两栖爬行动物新物种和新纪录. 中国两栖类信息系统.] (<http://www.amphibiachina.org/news/scientifictrends/132-2015>. 获取自2019年2月5日)
- Wang K, Chen HM (2017) Annual Review: Taxonomic Changes and Novelty of Herpetofauna from China in 2016. *AmphibiaChina*. (<http://www.amphibiachina.org/news/41>. accessed on 2019-02-05) [王凯, 陈宏满 (2017) 2016中国两栖爬行动物新种、新纪录及分类变动. 中国两栖类信息系统.] (<http://www.amphibiachina.org/news/scientifictrends/> 97-177. 获取自2019年2月5日.)
- Wang K, Jiang K, Pan G, Hou M, Siler CD, Che J (2015) A new species of *Japalura* (Squamata: Sauria: Agamidae) from Upper Lancang (Mekong) Valley of Eastern Tibet, China. *Asian Herpetological Research*, 6, 159–168.
- Wang K, Jiang K, Zou DH, Yan F, Siler CD, Che J (2016) Two new species of *Japalura* (Squamata: Agamidae) from the Hengduan Mountain Range, China. *Zoological Research*, 37, 41–56.
- Wang K, Ren JL, Jiang K, Yuan ZY, Che J, Siler CD (2017) Rediscovery of the enigmatic Mountain Dragon, *Japalura yulongensis* (Reptilia: Sauria: Agamidae), with notes on its natural history and conservation. *Zootaxa*, 4318, 351–363.
- Wang K, Chen HM, Ren JL (2018) Annual Review: New Taxa and Taxonomic Changes of Chinese Herpetofauna in 2017. *AmphibiaChina*. (<http://www.amphibiachina.org/news/scientifictrends/113-193>. accessed on 2019-02-05) [王凯, 陈宏满, 任金龙 (2018) 2017中国两栖爬行动物新种、新纪录及分类变动. 中国两栖类信息系统.] (<http://www.amphibiachina.org/news/scientifictrends/112-192>. 获取自2019年2月5日)
- Wang K, Jiang K, Deepak V, Abhijit D, Hou M, Che J, Siler CD (2018a) On the occurrences of *Japalura kumaonensis* and *Japalura tricarinata* (Reptilia: Sauria: Draconinae) in China. *Herpetologica*, 74, 181–190.
- Wang K, Jiang K, Wang YF, Poyarkov NAJ, Che J, Siler CD (2018b) Rediscovery of *Japalura chapaensis* Bourret, 1937 (Reptilia: Squamata: Agamidae) from Southeast Yunnan Province, China. *Zoological Research*, 39, 105–113.
- Wang K, Ren JL, Chen HM (2019a) Taxonomic Novelty and Changes of Chinese Amphibians and Reptiles in 2018. *AmphibiaChina*. (<http://www.amphibiachina.org/news/scientifictrends/146-20190116>. accessed on 2019-02-05) [王凯, 任金龙, 陈宏满 (2019a) 2018年中国两栖爬行动物新物种及分类变动. 中国两栖类信息系统.] (<http://www.amphibiachina.org/news/scientifictrends/146-20190116>. 获取自2019年2月5日.)
- Wang K, Ren JL, Jiang K, Wu JW, Yang CH, Xu HM, Messenger K, Lei KM, Yu HL, Yang JY, Siler CD, Li JT, Che J (2019b) Revised distribution of some species in the genus *Diploderma* (Reptilia: Agamidae) in China. *Sichuan Journal of Zoology*, 38, 481–495. (in Chinese with English abstract) [王凯, 任金龙, 蒋珂, 巫嘉伟, 杨春华, 徐会明, Kevin Messenger, 雷开明, 余辉亮, 杨敬元, Cameron D. Siler, 李家堂, 车静 (2019b) 龙蜥属 *Diploderma* (爬行纲 Reptilia: 鬣蜥科 Agamidae) 部分物种的分类及分布记录修订. *四川动物*, 38, 481–495.]
- Wang K, Che J, Lin SM, Deepak V, Aniruddha DR, Jiang K, Jin JQ, Chen HM, Siler CD (2019a) Multilocus phylogeny and revised classification for mountain dragons of the genus *Japalura* s. l. (Reptilia: Agamidae: Draconinae) from Asia. *Zoological Journal of the Linnean Society*, 185, 246–267.
- Wang K, Ci P, Jiang K, Weng SY, Siler CD, Che J (2019b)

- Range extension of rare agamid species, *Pseudocalotes austeniana* (Annandale, 1908) (Reptilia: Saurinia: Draconinae) in the East Himalaya, with comments on its ontogenetic shift. *Checklist*, 15, 425–433.
- Wang K, Jiang K, Jin J, Liu X, Che J (2019c) Confirmation of *Trachischium guentheri* (Serpentes: Colubridae) from Tibet, China, with description of Tibetan *T. monticola*. *Zootaxa*, 4688, 101–110.
- Wang K, Jiang K, Ren J, Zou DH, Wu JW, Che J, Siler CD (2019d) A new species of dwarf *Japalura* sensu lato (Reptilia: Squamata: Agamidae) from the upper Mekong River in eastern Tibet, China, with notes on morphological variation, distribution, and conservation of two congeners along the same river. *Zootaxa*, 4544, 505–522.
- Wang K, Ren JL, Dong WJ, Jiang K, Siler CD, Che J (2019e) A new species of Plateau Viper (Reptilia: Serpentes: *Gloydius*) from the upper Lancang (=Mekong) Valley in the Hengduan Mountain Region, Tibet, China. *Journal of Herpetology*, 53, 224–236.
- Wang K, Wu JW, Jiang K, Chen JM, Miao BF, Siler CD, Che J (2019f) A new species of Mountain Dragon (Reptilia: Agamidae: *Diploderma*) from the *D. dymondi* complex in southern Sichuan Province, China. *Zoological Research*, 40, 456–465.
- Wang L, Deng XJ, Liu Y, Wu QQ, Liu Z (2019) A new species of the genus *Megophrys* (Amphibia: Anura: Megophryidae) from Hunan, China. *Zootaxa*, 4695, 301–330.
- Wang Y, Hsiao YW, Lee KH, Tseng HY, Lin Y, Komaki S, Lin SM (2017) Acoustic differentiation and behavioral response reveals cryptic species within *Buergeria* treefrogs (Anura, Rhacophoridae) from Taiwan. *PLoS ONE*, 12, e0184005.
- Wang YF, Liu BQ, Jiang K, Jin W, Xu JN, Wu CH (2017) A new species of the horn toad of the genus *Xenophrys* from Zhejiang, China (Amphibia: Megophryidae). *Chinese Journal of Zoology*, 52, 19–29. (in Chinese with English abstract) [王聿帆, 刘宝权, 蒋珂, 金伟, 许济南, 吴丞昊 (2017) 中国浙江省发现异角蟾属一新种(两栖纲: 角蟾科). *动物学杂志*, 52, 19–29.]
- Wang YY, Lau M, Yang JH, Chen GL, Liu ZY, Pang H, Liu Y (2015) A new species of the genus *Odorrana* (Amphibia: Ranidae) and the first record of *Odorrana bacboensis* from China. *Zootaxa*, 3999, 235–254.
- Wang YY, Wang J, Liu ZY (2016) Description of a new species of the genus *Ptychozoon* (Squamata: Gekkonidae), representing a new national record of this genus from southern Yunnan Province, China. *Zootaxa*, 4084, 406–420.
- Wang YY, Gong SP, Liu P, Wang X (2017a) A new species of the genus *Takydromus* (Squamata: Lacertidae) from Tianjingshan Forestry Station, northern Guangdong, China. *Zootaxa*, 4338, 441–458.
- Wang YY, Guo Q, Liu ZY, Lyu ZT, Wang J, Luo L, Sun YJ, Zhang YW (2017b) Revisions of two poorly known species of *Opisthotropis* Günther, 1872 (Squamata: Colubridae: Natricinae) with description of a new species from China. *Zootaxa*, 4247, 391–412.
- Wu SP, Huang CC, Tsai CL, Lin TE, Jhang JJ, Wu SH (2016) Systematic revision of the Taiwanese genus *Kurixalus* members with a description of two new endemic species (Anura, Rhacophoridae). *ZooKeys*, 557, 121–153.
- Wu YH, Suwannapoom C, Xu K, Chen JM, Jin JQ, Chen HM, Murphy RW, Che J (2019) A new species of the genus *Raorchestes* (Anura: Rhacophoridae) from Yunnan Province, China. *Zoological Research*, 40, 558–563.
- Xie YL, Wang P, Zhong GH, Zhu F, Liu Q, Che J, Shi L, Murphy RW, Guo P (2018) Molecular phylogeny found the distribution of *Bungarus candidus* in China (Squamata: Elapidae). *Zoological Systematics*, 43, 109–117.
- Yan F, Jiang K, Wang K, Jin JQ, Suwannapoom C, Li C, Che J (2016) The Australasian frog family Ceratobatrachidae in China, Myanmar and Thailand: Discovery of a new Himalayan forest frog clade. *Zoological Research*, 37, 7–14.
- Yan J, Lin YB, Guo WB, Li P, Zhou KY (2016) A new species of *Hemiphyllodactylus* Bleeker, 1860 (Squamata: Gekkonidae) from Guizhou, China. *Zootaxa*, 4117, 543–554.
- Yang DT (1991) Phylogenetic systematics of the *Amolops* group of ranid frogs of southeastern Asia and the greater Sudan Islands. *Fieldiana Zoology*, 63, 1–42.
- Yang DT, Liu WZ (1994) Relationships among species groups of *Varanus* from Southern Southeastern Asia with description of a new species from Vietnam. *Zoological Research*, 15, 11–15. (in Chinese with English abstract) [杨大同, 刘万兆 (1994) 南亚和东南亚巨蜥居群的种间亲缘和越南一新种描述. *动物学研究*, 15, 11–15.]
- Yang DT, Rao DQ (2008) Amphibia and Reptilia of Yunnan. Yunnan Science and Technology Press, Kunming. (in Chinese) [杨大同, 饶定齐 (2008) 云南两栖爬行动物. 云南科技出版社, 昆明.]
- Yang JH (2015) A new species of the genus *Gekko* Laurenti (Squamata: Sauria: Gekkonidae) from Guangxi, China. *Zootaxa*, 3936, 287–295.
- Yang JH, Chan BPL (2015) Two new species of the genus *Goniurosaurus* (Squamata: Sauria: Eublepharidae) from southern China. *Zootaxa*, 3980, 67–80.
- Yang JH, Chan BPL (2018) A new phytotelm-breeding treefrog of the genus *Nasutixalus* (Rhacophoridae) from western Yunnan of China. *Zootaxa*, 4388, 191–206.
- Yang JH, Zheng X (2018) A new species of the genus *Calamaria* (Squamata: Colubridae) from Yunnan Province, China. *Copeia*, 106, 485–491.
- Yang JH, Rao DQ, Wang YY (2015) A new species of the genus *Liuxalus* (Anura: Rhacophoridae) from southern China. *Zootaxa*, 3990, 247–258.
- Yang JH, Wang YY, Chan BP (2016a) A new species of the

- genus *Leptobrachium* (Anura: Megophryidae) from the Gaoligongshan Mountain Range, China. *Zootaxa*, 4150, 133–148.
- Yang JH, Wang YY, Chen GL, Rao DQ (2016b) A new species of the genus *Leptolalax* (Anura: Megophryidae) from Mt. Gaoligongshan of western Yunnan Province, China. *Zootaxa*, 4088, 379–394.
- Yang JH, Wang J, Wang YY (2018a) A new species of the genus *Megophrys* (Anura: Megophryidae) from Yunnan Province, China. *Zootaxa*, 4413, 325–338.
- Yang JH, Zeng ZC, Wang YY (2018b) Description of two new sympatric species of the genus *Leptolalax* (Anura: Megophryidae) from western Yunnan of China. *PeerJ*, 6, e4586.
- Yang JH, Huang XY (2019) A new species of *Scutigera* (Anura: Megophryidae) from the Gaoligongshan Mountain Range, China. *Copeia*, 107, 10–21.
- You CW, Poyarkov NA, Lin SM (2015) Diversity of the snail-eating snakes *Pareas* (Serpentes, Pareatidae) from Taiwan. *Zoologica Scripta*, 44, 349–361.
- Yu GH, Wang J, Hou M, Rao DQ, Yang JX (2017) A new species of the genus *Kurixalus* from Yunnan, China (Anura, Rhacophoridae). *ZooKeys*, 694, 71–93.
- Yu GH, Hui H, Rao DQ, Yang JX (2018) A new species of *Kurixalus* from western Yunnan, China (Anura, Rhacophoridae). *ZooKeys*, 770, 211–226.
- Yu GH, Hui H, Wang J, Rao D, Wu Z, Yang JX (2019a) A new species of *Gracixalus* (Anura, Rhacophoridae) from Yunnan, China. *ZooKeys*, 851, 91–111.
- Yu GH, Hui H, Hou M, Wu ZJ, Rao DQ, Yang JX (2019b) A new species of *Zhangixalus* (Anura: Rhacophoridae), previously confused with *Zhangixalus smaragdinus* (Blyth, 1852). *Zootaxa*, 4711, 275–292.
- Yu GH, Liu S, Hou M, Li S, Yang JX (2019c) Extension in distribution of *Raorchestes parvulus* (Boulenger, 1893) (Anura: Rhacophoridae) to China. *Zootaxa*, 4577, 381–391.
- Yu GH, Wu ZJ, Yang JX (2019d) A new species of the *Amolops monticola* group (Anura: Ranidae) from southwestern Yunnan, China. *Zootaxa*, 4577, 548–560.
- Yuan ZY, Suwannapoom C, Yan F, Poyarkov NA, Nguyen SN, Chen HM, Chomdej S, Murphy RW, Che J (2016a) Red River barrier and Pleistocene climatic fluctuations shaped the genetic structure of *Microhyla fissipes* complex (Anura: Microhylidae) in southern China and Indochina. *Current Zoology*, 62, 531–543.
- Yuan ZY, Wu YJ, Zhou JJ, Che J (2016b) A new species of the genus *Paramesotriton* (Caudata: Salamandridae) from Fujian, southeastern China. *Zootaxa*, 4205, 549–563.
- Yuan ZY, Zhang BL, Che J (2016c) A new species of the genus *Pachytriton* (Caudata: Salamandridae) from Hunan and Guangxi, southeastern China. *Zootaxa*, 4085, 219–232.
- Yuan ZY, Sun RD, Chen JM, Rowley JLL, Wu ZJ, Hou SB, Che J (2017) A new species of the genus *Leptolalax* (Anura: Megophryidae) from Guangxi, China. *Zootaxa*, 4300, 551–570.
- Yuan ZY, Jin JQ, Li JN, Stuart BL, Wu J (2018) A new species of Cascade Frog (Amphibia: Ranidae) in the *Amolops monticola* group from China. *Zootaxa*, 4415, 498–512.
- Yuan ZY, Liu XL, Wang K, Wang J, Chen JM, Jin JQ, Wei PF, Zhou JJ, Che J (2019) *Nidirana chapaensis* (Bourret, 1937), one additional anuran species for the amphibian fauna of China. *Zootaxa*, 4571, 580–588.
- Zaher H, Grazziotin FG, Cadle JE, Murphy RW, Moura-Leite JCD, Bonatto SL (2009) Molecular phylogeny of advanced snakes (Serpentes, Caenophidia) with an emphasis on South American Xenodontines: A revised classification and descriptions of new taxa. *Papéis Avulsos de Zoologia*, 49, 115–153.
- Zaher H, Murphy RW, Arredondo JC, Graboski R, Machado-Filho PR, Mahlow K, Montingelli GG, Quadros AB, Orlov NL, Wilkinson M (2019) Large-scale molecular phylogeny, morphology, divergence-time estimation, and the fossil record of advanced caenophidian snakes (Squamata: Serpentes). *PLoS ONE*, 14, e0216148.
- Zeng ZC, Zhao J, Chen CQ, Chen GL, Zhang Z, Wang YY (2017) A new species of the genus *Gracixalus* (Amphibia: Anura: Rhacophoridae) from Mount Jinggang, southeastern China. *Zootaxa*, 4250, 171–185.
- Zhang MH, Fei L, Ye CY, Wang YF, Wang B, Jiang JP (2018) A new species of genus *Microhyla* (Amphibia: Anura: Microhylidae) from Zhejiang Province, China. *Asian Herpetological Research*, 9, 135–148.
- Zhang MW, Zong Y, Ma JF (1998) *Fauna Sinica, Reptilia, Vol. 1: General Accounts for Reptilia, Testudiformes and Crocodyliformes*. Science Press, Beijing. (in Chinese) [张孟闻, 宗愉, 马积藩 (1998) 中国动物志爬行动物, 第一卷, 总论龟鳖目鳄形目. 科学出版社, 北京.]
- Zhang MW, Han FY, Ye J, Ni QY, Li Y, Yao YF, Xu HL (2018) The entire mitochondrial genome of Vietnam Wart Newt *Paramesotriton deloustali* (Salamandridae: *Paramesotriton*) with a new distribution record from China. *Conservation Genetics Resources*, 10, 551–554.
- Zhang YN, Li G, Xiao N, Li J, Pan T, Wang H, Zhang BW, Zhou J (2017) A new species of the genus *Xenophrys* (Amphibia: Anura: Megophryidae) from Libo County, Guizhou, China. *Asian Herpetological Research*, 8, 75–85.
- Zhao EM (2004) *Colored Atlas of Sichuan Reptiles*. China Forestry Publishing House, Beijing. (in Chinese) [赵尔宓 (2004) 四川爬行类原色图鉴. 中国林业出版社, 北京.]
- Zhao EM (2006) *Snakes of China*. Anhui Science and Technology Publishing House, Anhui. (in Chinese) [赵尔宓 (2006) 中国蛇类. 安徽科学技术出版社, 合肥.]
- Zhao EM, Adler K (1993) *Herpetology of China*. Society for the Study of Amphibians and Reptiles: Contribution to Her-

- petology. Oxford.
- Zhao EM, Jiang YM, Huang QY, Hu SQ, Fei L, Ye CY (1993) Latin-Chinese-English Names of Amphibians and Reptiles. Science Press, Beijing. (in Chinese) [赵尔宓, 江跃明, 黄庆云, 胡淑琴, 费梁, 叶昌媛 (1993) 拉英汉两栖爬行动物名称. 科学出版社, 北京.]
- Zhao EM, Huang MH, Zong Y, et al (1998) Fauna Sinica, Reptilia, Vol. 3: Squamata, Serpentes. Science Press, Beijing. (in Chinese) [赵尔宓, 黄美华, 宗愉 等 (1998) 中国动物志爬行纲, 第三卷, 有鳞目蛇亚目. 科学出版社, 北京.]
- Zhao EM, Zhao KT, Zhou KY et al (1999) Fauna Sinica, Reptilia, Vol. 2: Squamata, Lacertilia. Science Press, Beijing. (in Chinese) [赵尔宓, 赵肯堂, 周开亚等 (1999) 中国动物志爬行纲, 第二卷, 有鳞目蜥蜴亚目. 科学出版社, 北京.]
- Zhao EM, Zhang XW, Zhao H, Adler K (2000) Revised checklist of Chinese amphibia & reptilia. Sichuan Journal of Zoology, 19, 196–207. (in Chinese with English abstract) [赵尔宓, 张学文, 赵蕙, 鹰岩 (2000) 中国两栖纲和爬行纲动物校正名录. 四川动物, 19, 196–207.]
- Zhao HP, Yang JX, Wang CP, Li PP, Murphy RW, Che J, Yuan ZY (2017) A new species of the genus *Rana* from Henan, central China (Anura, Ranidae). ZooKeys, 694, 95–108.
- Zhong GH, Chen WD, Liu Q, Zhu F, Peng PH, Guo P (2015) Valid or not? Yunnan mountain snake *Plagiopholis unipostocularis* (Serpentes: Colubridae: Pseudoxenodontinae). Zootaxa, 4020, 390–396.
- Zhou RB, Wang N, Chen B, Liang B (2018) Morphological evidence uncovers a new species of *Goniurosaurus* (Squamata: Eublepharidae) from the Hainan Island, China. Zootaxa, 4369, 281–291.
- Zhou ZY, Sun ZY, Qi S, Lu YY, Lyu ZT, Wang YY, Li PP, Ma JZ (2019) A new species of the genus *Hebius* (Squamata: Colubridae: Natricinae) from Hunan Province, China. Zootaxa, 4674, 68–82.

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附录 Supplementary Material

附录1 中国现生、原生两栖动物更新名录

Appendix 1 The updated checklist of extent, native amphibian species of China
<http://www.biodiversity-science.net/fileup/PDF/2019238-1.pdf>

附录2 中国现生、原生爬行动物更新名录

Appendix 2 The updated checklist of extent, native reptile species of China
<http://www.biodiversity-science.net/fileup/PDF/2019238-2.pdf>