**曾念开（导师）简介**

**1. 个人基本情况**

曾念开，男，博士，1978年生，福建漳平人，海南医学院三级教授，硕、博士生导师，中国菌物学会理事，中国菌物学会菌物多样性及系统学专业委员会委员，海南国际医药创新联合基金会药学服务创新专业委员会常务委员，海南省食品安全与营养健康科普宣传风险交流专家组专家，**海南省“515人才工程”第三层次人选，海南省拔尖人才，海南省首届“优秀导师团队”负责人，海南医学院首届“优秀研究生导师”，海南医学院首届“优秀导师团队”负责人，海南医学院生药学学科负责人。**

**2001年获吉林农业大学学士学位，2007年获北京协和医学院-清华大学硕士学位，**2012年获中国科学院昆明植物研究所理学博士学位。担任Fungal Diverstiy、Mycologia、Mycological Progress、Phytotaxa等国际期刊的审稿人。多年来从事药用真菌资源、分类、分子系统发育、人工培养及相关大健康产品开发等研究工作；发现并正式发表真菌新属2个，新种75个，中国新记录属1个，中国新记录种2个，新组合种19个。发表学术论文70余篇，其中54篇载SCI源刊物上；主编或副主编专著7部，参编9部；授权专利6项；主持国家自然科学基金项目4项、海南省重点研发计划项目1项、海南省高层次人才项目1项、海南医学院自然科学研究“揭榜挂帅”项目1项、中国科学院重点实验室开放基金1项，参加国家自然科学基金面上项目1项，国家科技部支撑计划项目1项。培养硕博士研究生16名。



1. **研究方向**

药用真菌资源与可持续利用。

1. **发表的学术论文和专著**

**（1）学术论文（注：右上角标“\*”的为通讯作者）**

**2022年**

[54] Chang Xu, Xu Zhang, Yun-Xia Chen, Rou Xue, Zhi-Fang Le, Jian-Rui Wang, Yi Li, **Nian-Kai Zeng\***. *Boletellus putuoensis* (Boletaceae, Boletales), a new bolete from subtropical China. Phytotaxa 554 (2): 149–162

[53] Yu-Ying Yang, Chang Xu, Yi Wang, Le Li, Lang-Xing Yuan, Fu-Wei Zhao, **Nian-Kai Zeng\***. 2022. *Boletus littoreus* (Boletaceae, Boletales), a new species with a white basidioma from Hainan, China. Phytotaxa 554 (2): 176–188

[52] Yu-Zhuo Zhang, Ping Zhang, Bart Buyck, Li-Ping Tang, Zhi-Qun Liang\*, Ming-Sheng Su, Yan-Jia Hao, Hong-Yan Huang, Wen-Hao Zhang, Zuo-Hong Chen, **Nian-Kai Zeng\***. 2022. A contribution to knowledge of *Craterellus* (Hydnaceae, Cantharellales) in China: three new taxa and amended descriptions of two previous species. Frontiers in Microbiology 13: 906296

[51] Yu-Zhuo Zhang, Wen-Fei Lin, Bart Buyck, Zhi-Qun Liang, Ming-Sheng Su,

Zuo-Hong Chen, Ping Zhang, Shuai Jiang, Dong-Yu An, **Nian-Kai Zeng\***. 2022. Morphological and phylogenetic evidences reveal four new species of

*Cantharellus* subgenus *Cantharellus* (Hydnaceae, Cantharellales) from China. Frontiers in Microbiology 13: 900329

[50]Xu Zhang, Wei Qiang Qin, Zhi-Qun Liang**\***, Run Tian, **Nian-Kai Zeng\***. 2022. *Rubroboletus flammeus* (Boletaceae, Boletales), a novel species unveiled from subtropical China based on morphological and phylogenetic evidences. Archives of Microbiology 204: 379

[49] Run Tian, Hui Chai, Jun-Qiang Qiu, Zhi-Qun Liang, Hui-Jing Xie, Yong Wang\*, **Nian-Kai Zeng\***. 2022. Preparation, structural characterisation, and antioxidant activities of polysaccharides from eight boletes (Boletales) in tropical China. Mycology https://doi.org/10.1080/21501203.2022.2069172

[48] Yongqi Tana, **Nian-Kai Zeng**, Baojun Xu\*. 2022. Chemical profiles and health-promoting effects of porcini mushroom (*Boletus edulis*): A narrative review. Food Chemistry 390: 133199

[47] Zhui Li, Xu Zhang, Shuai Jiang, You-Dong Ji, Yi Wang\*, **Nian-Kai Zeng\***. *Tylopilus yangzhuliangii* (Boletaceae, Boletales), a new bolete from tropical China. Phytotaxa 543 (2): 135–149

[46] Yun-Xiao Han, Zhi-Qun Liang\*, Shuai Jiang, **Nian-Kai Zeng\***. 2022. *Russula hainanensis* (Russulaceae, Russulales), a new species from tropical China. Phytotaxa 552 (1): 35–50

[45] Hui-Jing Xie, Li-Ping Tang, Man Mu, Yu-Guang Fan, Shuai Jiang, Ming-Sheng Su, Zhi-Qun Liang\*, **Nian-Kai Zeng\***. 2022. A contribution to knowledge of *Gyroporus* (Gyroporaceae, Boletales) in China: three new taxa, two previous species, and one ambiguous taxon, Mycological Progress 21(1): 71–92.

[44] Run Tian,Zhi-Qun Liang, Yong Wang\*, **Nian-Kai Zeng\***. 2022. Analysis of aromatic components of two edible mushrooms, *Phlebopus portentosus* and *Cantharellus yunnanensis* using HS-SPME/GC-MS. Results in Chemistry 4: 100282.

[43] Chang Xu, Zhi-Qun Liang**\***, Shuai Jiang, Ping Zhang, Sheng-Zhuo Huang, **Nian-Kai Zeng\***. 2022.Notes on two species of *Calostoma* (Calostomataceae, Boletales) from the south of China. Phytotaxa 533(1): 49–61.

**2021年**

[42] Chang Xu, **Zhi-Qun Liang\***, Hui-Jing Xie, Shuai Jiang, Xin-Hua Fu, **Nian-Kai Zeng\***. 2021. Two new species of*Chalciporus* (Boletaceae, Boletales) from tropical China. Mycological Progress 20: 1573–1582.

[41] 陈晗, 张争, 陈向东, 王勇, 王琦宏, **曾念开\***. 2021. 海南橡胶林下不同栽培方式对赤芝多糖和灵芝酸含量的影响. 贵州科学 39(5): 16–20

[40] 蒋帅, 毕家豪, 范宇光, **曾念开\***. 2021. 药用真菌韦伯灵芝菌丝培养特性的研究. 贵州科学 39(4): 33–37

[39] Chang Xu, Zhi-Qun Liang\*, Ming-Sheng Su, Shuai Jiang, Yun Chen, Yu-Guang Fan, **Nian-Kai Zeng\***. 2021. *Austroboletus brunneisquamus* (Boletaceae, Boletales), a new ectomycorrhizal fungus from a tropical rainforest, China. Forests 12: 1438.

[38] Lu-Ling Wu, Zhi-Qun Liang\*, Ming-Sheng Su, Yu-Guang Fan, Ping Zhang, Shuai Jiang, Yan-Liu Chen, Yan-Jia Hao, **Nian-Kai Zeng\***. 2021. Updated taxonomy of Chinese *Phylloporus* (Boletaceae, Boletales): six new taxa and four redescribed species. Mycological Progress 20: 1243–1273.

[37] Hui-Jing Xie, Chun-Xia Zhang, Ming-Xia He, Zhi-Qun Liang\*, Xiao-Hua Deng, **Nian-Kai Zeng\***. *Buchwaldoboletus xylophilus* and *Phlebopus portentosus*, two non-ectomycorrhizal boletes from tropical China. Phytotaxa 520 (2): 137–154.

[36] Xu Zhang, Zhi-Qun Liang\*, Shuai Jiang, Chang Xu, Xin-Hua Fu, **Nian-Kai Zeng\***. 2021. *Baorangia duplicatopora* (Boletaceae, Boletales), a new bolete from tropical China. Phytotaxa 508 (1): 49–58.

[35] Shuai Jiang, Hong-Xu Mi, Hui-Jing Xie, Xu Zhang, Yun Chen, Zhi-Qun Liang, **Nian-Kai Zeng\***. 2021. *Neoboletus infuscatus*, a new tropical bolete from Hainan, southern China. Mycoscience 62: 205–211.

[34] Yu-Zhuo Zhang, Zhi-Qun Liang\*, Hui-Jing Xie, Lu-Ling Wu, Rou Xue, **Nian-Kai Zeng\***. 2021. *Cantharellus macrocarpus* (Cantharellaceae, Cantharellales), a new species from tropical China. Phytotaxa 484 (2): 170–180.

**2020年**

1. Hui-Jing Xie, Wen-Fei Lin, Shuai Jiang, Rou Xue, Lu-Ling Wu, Yu-Zhuo Zhang, Zhi-Qun Liang\*, **Nian-Kai Zeng\***, Ming-Sheng Su. 2020. Two new species of *Hortiboletus* (Boletaceae, Boletales) from China. Mycological Progress 19: 1377–1386.

[32] Yi Wang, Ming-Sheng Su, Shuai Jiang, Rou Xue, Lu-Ling Wu, Hui-Jing Xie, Yu-Zhuo Zhang, **Zhi-Qun Liang\***, **Nian-Kai Zeng\***. 2020. The genus *Hourangia* in China and a description of *Aureoboletus erythraeus* sp. nov. Phytotaxa 472 (2): 87–106.

1. Wen-Jie Yu, Cheng Chang, Li-Wu Qin, **Nian-Kai Zeng**, Shao-Xian Wang\*, Yu-Guang Fan\*. 2020. *Pseudosperma citrinostipes* (Inocybaceae), a new species associated with Keteleeria from southwestern China. Phytotaxa 450 (1): 8–16.

[30] Yan-Liu Chen, Ming-Sheng Su\*, Lin-Ping Zhang\*, Qin Zou, Fei Wu, **Nian-Kai Zeng**, Meng Liu. 2020. *Pseudohydnum brunneiceps* (Auriculariales, Basidiomycota), a new species from Central China. Phytotaxa 441 (1): 87–94

[29] Chao-Qun Wang, Tai-Hui Li\*, Ming Zhang, Xiao-Lan He, Wei-Qiang Qin, Tie-Zhi Liu, **Nian-Kai Zeng**, Xiang-Hua Wang, Jian-Wei Liu, Tie-Zheng Wei, Jiang Xu, Yue-Qiu Li, Ya-Heng Shen. 2020. *Hygrophorus* subsection *Hygrophorus* (Hygrophoraceae, Agaricales) in China. MycoKeys 68: 49–73.

**2019年**

[28] Ming Zhang, Tai-Hui Li\*, Chao-Qun Wang, **Nian-Kai Zeng**, Wang-Qiu Deng. 2019. Phylogenetic overview of *Aureoboletus* (Boletaceae, Boletales), with descriptions of six new species from China. MycoKeys 61: 111–145.

[27] Lu-Ling Wu, Zhi-Qun Liang\*, Rou Xue, Yu-Guang Fan, Shuai Jiang, Yong-Qing Fu, **Nian-Kai Zeng\***, Ming-Sheng Su. 2019. The genus *Crocinoboletus* (Boletaceae, Boletales): a new species and updated information for previously described species. Phytotaxa419 (1): 91–99.

[26] Xiang-Nyu Chen, Ming Zhang, Tai-Hui Li\*, **Nian-Kai Zeng**. 2019. A new species of *Heimioporus* (Boletaceae) from southern China. Phytotaxa 415 (4): 179–188.

[25] Rou Xue, Lu-Ling Wu, Shuai Jiang, Yan-Jia Hao, Hui Chai, Zhi-Qun Liang\*, **Nian-Kai Zeng****\***, Ming-Sheng Su. 2019. Two new species of the genus *Leccinellum* (Boletaceae, Boletales) from the south of China. Phytotaxa411 (2): 93–104.

[24] Yue-Ning Zhang, Rou Xue, Ming-Sheng Su, Lu-Ling Wu, **Nian-Kai Zeng\***. 2019. *Phylloporus rubiginosus*, a noteworthy lamellar bolete from tropical Asia. Guizhou Science 37(2): 1–5, 25

[23] Rou Xue, Zhi-Qun Liang\*, Hui Chai, Shuai Jiang, Li-Ping Tang, Yong-Qing Fu, Yu-Guang Fan, Lu-Ling Wu, **Nian-Kai Zeng**\*. 2019. The *Suillus spraguei* complex (Suillaceae, Boletales): new taxon, new hosts and amended descriptions. Phytotaxa401 (4): 239–256.

[22] Hui Chai, Zhi-Qun Liang, Rou Xue, Shuai Jiang, Shi-Hong Luo, Yong Wang, Lu-Ling Wu, Li-Ping Tang, Yun Chen, Deng Hong, **Nian-Kai Zeng\***. 2019. New and noteworthy boletes from subtropical and tropical China. MycoKeys 46: 55–96.

**2018年**

[21] **Nian-Kai Zeng\***, Hui Chai, Zhi-Qun Liang, Li-Ping Tang, Rou Xue, Zhu L. Yang\*. 2018. The genus *Heimioporus* in China. Mycologia 110 (6): 1110–1126.

[20] Kuan Zhao, **Nian-Kai Zeng\***, Li-Hong Han, Xiao-Ye Gao, Jian-Tao Liu, Gang Wu, Song-Hua Wang, Bing Gu\*. 2018. *Phylloporus pruinatus*, a new lamellate bolete from subtropical China. Phytotaxa 372 (3): 212–220.

[19] Rou Xue, Hui Chai, Yong Wang, Deng Hong, Ming-Sheng Su, Zhi-Qun Liang\*, **Nian-Kai Zeng\***. 2018. Species clarification of the locally famous mushroom *Suillus placidus* from the south of China with description of *S. huapi sp. nov*. Phytotaxa 371 (4): 251–259.

[18] **Nian-Kai Zeng**, Hui Chai, Shuai Jiang, Rou Xue, Yong Wang, Deng Hong, Zhi-Qun Liang\*. 2018. *Retiboletus nigrogriseus* and *Tengioboletus fujianensis*, two new boletes from the south of China. Phytotaxa 367 (1): 45–54.

[17] Hui Chai, Zhi-Qun Liang\*, Shuai Jiang, Xun-Long Fu, **Nian-Kai Zeng\***. 2018. *Lanmaoa rubriceps*, a new bolete from tropical China. Phytotaxa 347 (1): 71–80.

[16] Zhi-Qun Liang, Ming-Sheng Su, Shuai Jiang, Deng Hong, **Nian-Kai Zeng\***. 2018. *Tylopilus callainus*, a new species with a sea-green color change of hymenophore and context from the south of China. Phytotaxa 343 (3): 269–276.

**2017年**

[15] **Nian-Kai Zeng\***, Zhi-Qun Liang, Li-Ping Tang, Yan-Chun Li, Zhu L. Yang. 2017. The genus *Pulveroboletus* (Boletaceae, Boletales) in China. Mycologia 109(3): 422–442.

[14] Dong-Yu An, Zhi-Qun Liang, Shuai Jiang, Ming-Sheng Su, **Nian-Kai Zeng\***. 2017. *Cantharellus hainanensis*, a new species with a smooth hymenophore from tropical China. Mycoscience 58(6): 438–444.

[13] Zhi-Qun Liang, Hui Chai, Shuai Jiang, Zheng-Kun Ye, **Nian-Kai Zeng\***. 2017. The genus *Xanthoconium* (Boletaceae, Boletales) in tropical China. Phytotaxa295(3): 246–254.

[12] Zhi-Qun Liang, Ming-Sheng Su, Shuai Jiang, **Nian-Kai Zeng\***. 2017. *Marasmius campestris* sp. nov. (Marasmiaceae, Agaricales) from tropical China based on morphological and molecular evidence. Mycoscience 58(2): 77–84.

**2016年**

1. Zhi-Qun Liang, Dong-Yu An, Shuai Jiang, Ming-Shen Su,**Nian-Kai Zeng**\*. 2016. *Butyriboletus hainanensis* (Boletaceae, Boletales), a new species from tropical China. Phytotaxa267(4): 256–262.

[10] **Nian-Kai Zeng**, Zhi-Qun Liang, Gang Wu, Yan-Chun Li, Zhu L. Yang. 2016. The genus *Retiboletus* in China. Mycologia 108(2): 363–380.

**2015年**

1. **Nian-Kai Zeng**, Ming-Shen Su, Zhi-Qun Liang, Zhu L. Yang. 2015. A geographical extension of the North American genus *Bothia* (Boletaceae, Boletales) to East Asia with a new species *B. fujianensis* from China. Mycological Progress 14: 1015.

[8] **Nian-Kai Zeng**, Ming-Zhang, Zhi-Qun Liang. 2015. A new species and a new combination in the genus *Aureoboletus* (Boletales, Boletaceae) from southern China. Phytotaxa 222 (2): 129–137.

**2014年**

1. Ming-Sheng Su, Zhi-Qun Liang, Xiong-Dong Chen, Yong Wang, **Nian-Kai Zeng\***. 2014. *Hypholoma cinnabarinum* revisited: A contribution to knowledge of *Agaricus* subgenus *Lanagaricus* section *Trisulphurati* (Agaricaceae, Agaricales). Mycoscience 55(6): 449–455.

[6] **Nian-Kai Zeng**, Gang Wu, Yan-Chun Li, Zhi-Qun Liang, Zhu L. Yang. 2014. *Crocinoboletus*, a new genus of Boletaceae (Boletales) with unusual boletocrocin polyene pigments. Phytotaxa175 (3): 133–140.

[5] **Nian-Kai Zeng**, Zhi-Qun Liang, Zhu L. Yang. 2014. *Boletus orientialbus*, a new species with white basidioma from subtropical China. Mycoscience 55: 159–163.

**2013年**

[4] **Nian-Kai Zeng**, Li-Ping Tang, Yan-Chun Li, Bau Tolgor, Xue-Tai Zhu, Qi Zhao, Zhu L. Yang. 2013. The genus *Phylloporus* (Boletaceae, Boletales) from China: Morphological and multilocus DNA sequence analyses. Fungal Diversity 58: 73–101.

**2012年**

[3] **Nian-Kai Zeng**, Qing Cai, Zhu L. Yang. 2012. *Corneroboletus*, a new genus to accommodate the Southeast Asian *Boletus indecorus*. Mycologia 104 (6): 1420–1432.

**2011年**

[2] **Nian-Kai Zeng**, Li-Ping Tang, Zhu L. Yang. 2011. Type studies on two species of *Phylloporus* (Boletaceae, Boletales) described from southwestern China. Mycotaxon 117: 19–28.

[1] **Nian-Kai Zeng**, Zhu L. Yang. 2011. Notes on two species of *Boletellus* (Boletaceae, Boletales) from China. Mycotaxon 115: 413–423.

**（2）专著**

[1] **曾念开**, 蒋帅. 2020. 海南鹦哥岭大型真菌图鉴. 海口: 南海出版公司

[2] 李玉, 包海鹰. 2020. 中国菌物药. 郑州: 中原农民出版社（**副主编**）

[3] 马文章. 金平分水岭大型真菌、苔藓和蕨类植物多样性. 昆明: 云南人民出版社（**参编**）

[4] 黄璐琦 (总主编), 魏建和, 郑希龙（主编）. 2019. 中国中药资源大典⋅海南卷1. 北京: 北京科学技术出版社（**副主编**）

[5] 黄璐琦（总主编）, 魏建和, 郑希龙 (主编). 2019. 中国中药资源大典⋅海南卷. 北京: 北京科学技术出版社（**编委**）

[6] 图力古尔. 2018. 蕈菌分类学. 北京：科学出版社（**副主编**）

[7] 严仲铠，丁立起. 中华食疗本草. 北京：中国中医药出版社（**副主编**）

[8] 龙文兴等. 2018. 热带云雾林植物多样性. 北京：科学出版社（**参编**）

[9] 李玉，李泰辉，杨祝良，图力古尔，戴玉成. 中国大型菌物资源图鉴. 郑州：中原农民出版社（**摄影作者**）

[10] 唐丽萍. 2015. 澜沧江高等真菌彩色图鉴. 昆明：云南科技出版社（**参编**）

[11] 杨祝良. 2015. 中国鹅膏科真菌图志. 北京：科学出版社（**摄影作者**）

[12] 兰进，陈向东，**曾念开**. 2014. 名贵药用真菌栽培技术问答. 北京：化学工业出版社

[13] 吴兴亮，卯晓岚，图力古尔，宋斌，李泰辉，赵友兴，陈双林，**曾念开**，黄圣卓，文庭池，邓春英. 2013. 中国药用真菌. 北京：科学出版社

[14] 吴兴亮，戴玉成，李泰辉，杨祝良，宋斌. 2011. 中国热带真菌. 北京：科学出版社（**参编**）

[15] 刘明生. 2008. 黎药学概论. 北京：人民卫生出版社（**参编**）

**4. 获得的学术成果奖励**

[1] **曾念开**，梁志群，杨祝良，王勇. 2016. 中国热带地区药用牛肝菌资源的发掘. 第五届海南省高等学校优秀科研成果二等奖

[2] 2013年获海南省科技协会博士协会优秀年度论文二等奖

[3] 2011年获中国科学院昆明植物研究所生物多样性与生物地理学重点实验室2010年度学术研讨会学术报告一等奖

[4] 王秋颖，龚剑，陈世林，秦绍新，樊锦艳，**曾念开**. 2006. 药用真菌—桑黄人工规模种植技术及液体深层发酵. 安徽省科技进步三等奖

**5. 获得的发明专利**

[1] **曾念开**，梁志群，薛柔，柴慧，吴璐伶. 2020. 一种微生物抗菌提取物及其制备方法和应用（专利号：ZL201810746900.9）

[2] 梁志群，苏明声，**曾念开**. 2017. 一株二孢拟奥德蘑菌株及其粗多糖的提取和应用（专利号：ZL201510525867.3）

[3] **曾念开**，梁志群. 2015. 一种大型真菌拍摄多用板（专利号：ZL201420840455.X）

[4] **曾念开**，梁志群. 2015. 一种大型真菌标本采集箱（专利号：ZL201420840510.5）

[5] 吴吉安，陈向东，钟耀强，**曾念开**. 2013. 虎乳灵芝的段木栽培方法（专利号：ZL201310012530.3）

[6] 兰进，陈向东，姚自奇，**曾念开**. 2011. 有柄树舌栽培方法（专利号：

ZL201110195064.8）

1. **主持过的科研项目**

[1] 中国褶孔牛肝菌属真菌新物种的发现及分类学修订，No. JBGS202112，海南医学院自然科学研究“揭榜挂帅”项目，2021.9.1–2024.8.31，主持

[2] 海南岛齿菌科三个属真菌的分类学研究，No. 32160001，国家自然科学基金地区基金，2022.01–2025.12，主持

[3] 海南鹦哥岭牛肝菌目真菌新物种的发现，No. 820RC633，海南省自然科学基金高层次人才项目，2020.12–2023.12，主持

[4] 海南名贵药材灵芝种质资源发掘、保存和创新与新品种定向培育, No. ZDYF2019114, 海南省重点研发项目, 2019.4–2021.4，主持

[5] 海南热带松林乳牛肝菌亚目真菌的分类研究，No. 31760008，国家自然科学基金地区基金，2018.01–2021.12，主持

[6] 海南鹦哥岭牛肝菌目真菌的分类与分子系统发育研究，No. 31560005，国家自然科学基金地区基金，2016.01–2019.12，主持

[7] 海南牛肝菌科五个重要属的分类与分子系统发育研究，No. 31360008，国家自然科学基金地区基金，2014.01–2017.12，主持

[8] 中国热带地区牛肝菌科三个重要属的分类与分子系统发育研究，No. KLBB201303，中国科学院东亚植物多样性与生物地理学重点实验室开放课题，2013.09–2016.08，主持

**7. 获得的学术荣誉**

**海南省“515人才工程”第三层次人选，海南省拔尖人才，海南省首届“优秀导师团队”负责人，海南医学院首届“优秀研究生导师”，海南医学院首届“优秀导师团队”负责人。**

**8. 学术兼职**

中国菌物学会理事，中国菌物学会菌物多样性及系统学专业委员会委员，海南国际医药创新联合基金会药学服务创新专业委员会常务委员，海南省食品安全与营养健康科普宣传风险交流专家组专家。

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