This collection of articles, developed in association with the EU funded ViBRANT project, illustrates how advances to research infrastructures are reciprocally changing the practice of taxonomy. A detailed review of data issues in the life sciences (Thessen and Patterson 2011) sets the tone for subsequent articles in this special issue, whose contributions broadly fall into three categories. The initial articles consider some of the major infrastructure platforms that support the production and management of biodiversity data. These include the EDIT Platform for Cybertaxonomy, Wiki-based approaches including BioWikiFarm and the Scratchpads Virtual Research Environment. Later articles provide deeper coverage of specialist areas of interest to taxonomic and biodiversity researchers. The topics covered include the mark-up (Penev et al. 2011) and management (King et al. 2011) of taxonomic literature, geospatial assessment of species distributions (Bachman et al. 2011) and licensing issues specific to life science data (Hagedorn et al. 2011). Finally, the special issue closes with a series of research and review papers that provide detailed use cases illustrating how these research infrastructures are being put into practice. Highlights from this section include citizen science approaches to collecting species information by the COMBER Marine observation network (Arvanitidis et al. 2011) and the Australian Bush Blitz programme (Lambkin and Bartlett 2011); use of new tools for data publishing like the Global Biodiversity Information Facility (GBIF) Integrated Publishing Toolkit (IPT) and the DRYAD Data Repository; new forms of publication via "data papers" that allow checklists and identification keys to be formally published as structured datasets (e.g., Narwade et al. 2011); and finally new taxonomic revisions and species descriptions constructed from within the collaborative systems like XPER2 and Scratchpads.

# e-INFRASTRUCTURES FOR DATA PUBLISHING IN BIODIVERSITY SCIENCE

EDITED BY VINCENT SMITH & LYUBOMIR PENEV



Palirika culgoafloodplainensis Lambkin, 2011 sp. n

ZooKeys 150 ♦ 2011 Special Issue

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