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Editorial

Taxonomy in the 21st Century: Celebrating a New Chapter—First Impact Factor Received

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The field of taxonomy is undergoing a profound renaissance, driven by the integration of classic morphological descriptions with modern genomic, bioinformatic, and ecological tools. This Special Issue, entitled 'Taxonomy in the 21st Century: Celebrating a New Chapter—First Impact Factor Received' marks a monumental milestone for the journal *Taxonomy*. It celebrates the journal's official recognition within the global scientific community via its first Impact Factor, while highlighting the vital, cutting-edge contributions of modern taxonomists across diverse organismal groups.

The articles published within this volume reflect a vibrant and forward-looking discipline. Rather than relying solely on historical descriptive frameworks, the compiled works showcase how next-generation taxonomy achieves unprecedented precision by merging disciplines. Several major themes and breakthrough findings emerge from this collection:

- Genomics and Macroevolutionary Dynamics: Advancements in high-throughput sequencing have reshaped structural classification. Research into plant systems, such as the genomics and taxonomy of wild vs. feral *Vitis* (grapevines), highlights how pangenome graphs and machine learning help untangle complex parentage, crop domestication, and gene flow (Contribution 1).
- Complete Morphological and Ontogenetic Life-History Mapping: Papers in this Special Issue bridge research gaps in larval and juvenile taxonomy. Notably, a comprehensive overview of the megalopa stage across all Grapsidae crab genera utilized DNA barcoding alongside precise morphological descriptions, establishing essential mechanisms to differentiate complex marine planktonic stages (Contribution 2).
- Systematic Synopses and Historical Revalidations: Broad taxonomic treatments—such as the exhaustive synopsis of the Neotropical lianescent genus *Mascagnia* in Brazil (Contribution 3) and major reviews of highly diverse fish superorders such as Ostariophysi (Contribution 4)—underscore the endless need to re-evaluate historical collections, reassess conservation threats, and clean up polyphyletic classifications using modern software and methods.
- Integrative Species Discovery: New species are constantly being discovered across all taxonomic groups. This Special Issue describes new species in groups as diverse as Araceae (Contribution 5), Euphorbiaceae (Contribution 6), Trichoptera (Contribution 7), Lepidoptera (Contribution 8), Anura (Contribution 9), and Squamata (Contribution 10; Contribution 11). This showcase of achievements underscores the need for high-caliber journals to make this important research visible.

This Special Issue proves that 21st-century taxonomy is not merely a descriptive archival exercise, but an active, predictive framework vital for biodiversity conservation, ecology, and evolutionary biology. As *Taxonomy* enters this decorated new chapter with its milestone Impact Factor, we express our deep gratitude to the authors, reviewers, and

Received: 9 September 2026
Accepted: 9 September 2026
Published: 10 September 2026

editors whose rigorous standards made this achievement possible. We look forward to remaining a leading platform for discovering and cataloging the Earth's magnificent tree of life.

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflicts of interest.

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