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Title: Toward a DNA barcode reference database: Contributions from the ICES Working Group on Integrated Morphological and Molecular Taxonomy (WGIMT)

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The overarching goal of the ICES Working Group on Integrated Morphological and Molecular Taxonomy (WGIMT) is to promote and provide new tools for species-level taxonomic analysis of the pelagic ecosystem. WGIMT works towards these objectives with a particular focus on species recognition, discrimination, and identification of marine metazoan zooplankton. Closely allied with this are more specific goals, including the detection of cryptic species and determination of the evolutionary/systematic relationships between pelagic metazoan species. WGIMT seeks to contribute to efforts to analyze, recognize, and understand changes in community structure, species diversity, and species phenology and productivity. Furthermore, the group contributes to ICES efforts to understand and predict how these characteristics will affect foodwebs and trophic relationships, as well as the transfers and cycles of nutrients, chemical elements, energy, and biological production. WGIMT is designing and will maintain a web portal (see <http://wgimt.net/> and <http://www.ices.dk/community/groups/Pages/WGIMT.aspx>) to facilitate access to useful websites, materials, and online publications related to morphological, molecular, and optical approaches to species identification of marine zooplankton. Group membership includes expert morphological taxonomists for selected groups represented amongst the pelagic assemblage, as well as experts who use molecular approaches and techniques to examine a broad range of basic and applied research topics in zooplankton systematics, ecology, and evolution.

Keywords: DNA Barcode, Metabarcoding, Biodiversity

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