Revisi taksonomi kompleks spesies Eutropis carinata (Reptilia: Sauria: Scincidae: Lygosominae) = Taxonomic Revision of the Eutropis carinata species complex (Reptilia: Sauria: Scincidae: Lygosominae)

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Abstrak

Saat ini terdapat 47 spesies dari Genus Eutropis yang telah dipertelakan, dan sebagian besar tersebar di subkawasan India, Indocina, dan Sunda. Berdasarkan filogeografi molekuler menunjukkan bahwa radiasi dari kadal Asia genus Eutropis terbagi dalam enam sub-klad (subclade), yaitu: carinata, macularia, multifasciata, multicarinata, dan indeprensa. Studi filogenik terkini juga menunjukkan adanya populasi yang memisah pada genus Eutropis, namun belum disertai bukti morfologi sehingga menjadi permasalahan taksonomi. Oleh karena itu, penelitian ini bertujuan untuk mengevaluasi status taksonomi kelompok spesies kompleks Eutropis carinata dengan melakukan cara pemeriksaan ulang semua spesimen tipe (termasuk tipe sinonim) dan spesimen non tipe yang tersimpan di museum sejarah alam utama di dunia. Karakter yang diamati meliputi morfologi, morfometri, dan meristik. Karakter morfometri dianalisis secara univariat dan multivariat. Analisis multivariat dilakukan dengan menggunakan Principal Component Analysis (PCA) berdasarkan matriks korelasi rasio morfometri. Analisis statistik dilakukan dengan menggunakan program software statistik R. Penelitian ini berhasil melakukan revisi pertelaan yang komprehensif untuk setiap spesies di dalam genus Eutropis yang disertai dengan ilustrasi morfologi sisik. Hasil analisis morfologi dan morfometrik menunjukkan bahwa E. carinata mirip dan diduga berkerabat erat dengan E. dissimilis dan E. carinata, oleh karena itu E. innotata ditempatkan didalam kelompok E. carinata. Penelitian ini juga menempatkan E. trivittata sebagai sinonim dari E. dissimilis, dan menempatkan kembali M. vertebralis sebagai spesies valid yang sebelumnya diposisikan sebagai sinonimdari E. trivittata. Penelitian ini juga berhasil menyediakan peta distribusi terkini dari genus Eutropis yang disertai ilustrasi spesies berdasarkan literatur dan bukti spesimen di museum, serta status konservasi setiap spesies terkini hasil penilaian berdasarkan kriteria Redlist IUCN 2019.

.....The genus Eutropis currently consists of 47 described species, distributed predominantly in the Indian, Indochinese, and Sundaic subregions. Based on the molecular phylogeography, the radiation of the Asian scincid genus Eutropis shows six distinct subclades: carinata, macularia, multifasciata, multicarinata, and indeprensa. Although recent phylogeneic studies reveal distinctly divergent populations within Eutropis genus, the taxonomy is remained unresolved. Therefore, this research evaluated the current taxonomic status of the each and every species of the Eutropis carinata species complex, and revised the taxonomy after examining all the type specimens (including synonym types), and other voucher specimens deposited in major natural history museums in the world. Over 30 characters of morphology, morphometric, and meristic were measured and evaluated to identify and distinguish the currently recognized species and description of new species. The morphometric characters were assessed using univariate and multivariate analyses. Multivariate analysis was conducted using Principal Component Analysis (PCA) based on a correlation matrix of morphometric ratios using the R statistical software program. Based on the results, comprehensive re-descriptions for each and every species in the genus were provided including illustrations of scale morphology. Based on the morphological similarity, Eutropis innotata is placed within the E. carinata group,

as it is closely allied to E. dissimilis and E. carinata in morphological and morphometric traits. The illustration of the untraceable type specimen of E. trivittata depicted by Hardwicke in Gray (1834) from Dumdum near Kolkata, West Bengal matches with typical E. dissimilis, also described from Bengal, and we confirm the synonymy of these taxa. The holotype of Mabuia vertebralis Boulenger, 1887a from Belgaum, Karnataka, India, is redescribed and resurrected the nomen from the synonymy of Eutropis trivittata based on the morphological distinctiveness of the holotype and the western Indian populations. Updated distribution maps illustrated based on the published literature as well as evidence of museum specimens, and the conservation status of each species was reassessed based on the application of the IUCN Red List criteria 2019.