

VARIASI MORFOLOGIS DAN GENETIK ANGGOTA FAMILI ELEOTRIDAE DI DANAU TONDANO DAN LIMBOTO SERTA SUNGAI TAPODU DAN BOLANGO, SULAWESI BAGIAN UTARA

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INTISARI

Penelitian ini bertujuan untuk mengetahui variasi morfologis dan genetik anggota Famili Eleotridae yang hidup di Danau Tondano, Danau Limboto, Sungai Tapodu dan Sungai Bolango Sulawesi bagian utara. Empat habitat anggota Famili Eleotridae tersebut memiliki kondisi ekologis lingkungan yang berbeda, dua di antaranya yakni Danau Limboto dan Danau Tondano merupakan daerah dengan kondisi kritis. Pengamatan 65 karakter morfologis dilakukan pada 194 spesimen dari 3 spesies yakni *Giuris* cf. *margaritacea*, *Oxyeleotris* cf. *marmorata*, dan *Eleotris melanosoma*. Pengamatan variasi genetik dilakukan pada 26 individu dari ketiga spesies dengan penanda molekular ISSR (*Inter-simple sequence Repeat*). Hasil pengamatan karakter morfologis menunjukkan bahwa terdapat variasi morfologis dan genetik anggota Famili Eleotridae di 4 lokasi tersebut. *Oxyeleotris* cf. *marmorata* populasi Sungai Tapodu dan Sungai Bolango memiliki tubuh yang lebih ramping dan sirip pelvik yang lebih panjang dibanding populasi Danau Tondano. *Giuris* cf. *margaritacea* populasi Danau Limboto memiliki tubuh yang lebih lebar dibanding populasi Danau Tondano. Seluruh populasi memiliki variasi genetik yang tinggi dengan indeks similaritas berkisar antara 7-29 %.

Kata Kunci: Famili Eleotridae, variasi morfologis, variasi genetik, *Inter-simple sequence Repeat* (ISSR)

MORPHOLOGICAL AND GENETIC VARIATION OF ELEOTRID INHABITING TONDANO & LIMBOTO LAKE, AND TAPODU & BOLANGO RIVER, IN NORTHERN PART OF SULAWESI

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ABSTRACT

This current research aims at finding out the morphological and genetic variation of Eleotrid inhabiting Tondano Lake, Limboto Lake, Tapodu River and Bolango River of northern part of Sulawesi. Those four habitats of Eleotrid have different ecological condition in which two of them are critically endangered. The observation on 65 morphological characters was done to 194 specimen from 3 species which are *Giuris* cf. *margaritacea*, *Oxyeleotris* cf. *marmorata*, and *Eleotris melanosoma*. The observation on genetical variation was done to 26 individuals from those three species using molecular marker of ISSR (Inter-simple sequence Repeat). The result of observation on morphological character shows that there are morphological and genetical variation within the Family in those four locations. Population of *Oxyeleotris* cf. *marmorata* living in Tapodu River and Bolango River were found to have thinner body and longer pelvic fin than those inhabiting Tondano Lake. In contrast, *Giuris* cf. *margaritacea* living in Limboto lake were found to have wider body than those living in Tondano lake. All the population possess highly genetical variation with similarity index ranging from 7 to 29 %.

Keywords: Eleotrid, morphological variation, genetic variation, *Inter-simple sequence Repeat* (ISSR)