

INTISARI

KARAKTERISASI FENOTIP F1 GUPPY (*Poecilia reticulata*, Peters 1859) HASIL HIBRIDISASI STRAIN SNAKESKIN MOSAIC DAN STRAIN HALF BLACK WHITE

Penelitian ini bertujuan untuk mengetahui variasi fenotip F1 hasil hibridisasi *strain snakeskin mosaic* dengan *strain half black white* dan pola pewarisan sifat dari induk ke anakan F1 hasil hibridisasi. Penelitian ini dilakukan dengan dua perlakuan diantaranya, hibridisasi jantan *snakeskin mosaic* dengan betina *half black white* (P1) dan hibridisasi jantan *half black white* dengan betina *snakeskin mosaic* (P2). Pemijahan dilakukan dengan menggunakan wadah toples ukuran 4 L. Pemijahan diulang sebanyak tiga kali. F1 hasil hibridisasi kemudian dipelihara selama 90 hari. Pengamatan fenotip anakan meliputi warna, corak, dan morfometri. Analisis data dilakukan secara deskriptif meliputi warna dan corak. Data morfometri dianalisis dengan menggunakan *independent T-test*. Hasil penelitian menunjukkan terdapat tiga fenotip pada P1 meliputi saddleback mosaic, *half black white-yellow*, dan *half black AOC*, sedangkan pada P2 terdapat tiga fenotip meliputi *snakeskin mosaic*, *mosaic*, dan *half black AOC*. Data morfometri rasio lebar ekor dibagi panjang total pada F1 jantan P1 lebih besar dibandingkan P2. Hibridisasi antara *strain snakeskin mosaic* dengan *strain half black white* menunjukkan adanya pola fenotip baru pada F1 dan menunjukkan pola pewarisan sifat gen guppy betina pada kedua *strain* lebih dominan dari jantannya.

Kata kunci: corak, morfometri, persilangan, varietas, warna

ABSTRACT

CHARACTERIZATION OF F1 PHENOTYPES OF GUPPY (*Poecilia reticulata*, Peters 1859) RESULTED FROM HYBRIDIZATION BETWEEN SNAKESKIN MOSAIC AND HALF BLACK WHITE STRAINS

This research aims to determine the phenotype variation of F1 offspring resulting from the hybridization of the snakeskin mosaic strain with the half black white strain and the inheritance pattern of traits from the parents to the F1 hybrid offspring. The study was conducted with two treatments, including the hybridization of male snakeskin mosaic with female half black white (P1) and the hybridization of male half black white with female snakeskin mosaic (P2). Breeding was carried out using 4-liter jars, and the breeding was repeated three times. The F1 hybrid offspring were then raised for 90 days. Phenotypic observations of the offspring included color, pattern, and morphometrics. Data analysis was conducted descriptively for color and pattern, while morphometric data were analyzed using an independent T-test. The results of the research showed that there were three phenotypes in P1, including saddleback mosaic, half black white-yellow, and half black AOC, while in P2, there were three phenotypes, including snakeskin mosaic, mosaic, and half black AOC. The morphometric data, specifically the ratio of tail width to total length, in F1 males from P1 were larger compared to those from P2. The hybridization between the snakeskin mosaic strain and the half black white strain revealed the presence of new phenotypic patterns in F1 and indicated that the inheritance pattern of guppy female genes in both strains was more dominant than that of the males.

Keywords: colors, cross breeding, morphometry, patterns, varieties