

ABSTRAK

Ikan nila salin (*Oreochromis niloticus*) merupakan salah satu ikan komoditas penting dalam bisnis ikan air payau dunia, yang memiliki nilai ekonomis tinggi. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan Vitamin E dan ekstrak daun katuk (*Sauropus androgynus*) terhadap performa reproduksi ikan nila salin betina (*Oreochromis niloticus*). Penelitian dilaksanakan pada tanggal 27 Maret – 2 Mei 2025 di Kembang Tani Farm, Desa Lancang Barat, Kecamatan Dewantara, Aceh Utara. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) non-faktorial dengan 4 perlakuan dan 3 ulangan, yaitu: A (pakan komersil/kontrol), B (Vitamin E 200 mg/kg + ekstrak daun katuk 150 g/kg), C (Vitamin E 200 mg/kg + ekstrak daun katuk 175 g/kg), dan D (Vitamin E 200 mg/kg + ekstrak daun katuk 200 g/kg). Hasil penelitian ini berdasarkan uji F (ANOVA) memberikan hasil berpengaruh nyata terhadap semua parameter reproduksi ikan nila salin betina. Hasil terbaik terdapat pada perlakuan C dengan TKG IV, SGR panjang 0.653%, SGR bobot 1.55%, IKG 4.28%, diameter telur 2.12 mm, fekunditas 3798 butir, HR 0.81%, dan SR 0.83%. Parameter kualitas air selama penelitian (suhu 26-31°C, pH 7-8,4, salinitas 20 ppt, DO 5,2-6,9 mg/L).

Kata kunci: Daun katuk, fekunditas, *Oreochromis niloticus*, reproduksi, vitamin

ABSTRACT

Saline tilapia (*Oreochromis niloticus*) is one of the important fish commodities in the global brackish water aquaculture industry with high economic value. This study aimed to determine the effect of Vitamin E and katuk leaf extract (*Sauropus androgynus*) supplementation on the reproductive performance of female saline tilapia (*Oreochromis niloticus*). The research was conducted from March 27 to May 2, 2025, at Kembang Tani Farm, Lancang Barat Village, Dewantara District, North Aceh. A Completely Randomized Design (CRD) non-factorial was used with four treatments and three replications: A (commercial feed/control), B (Vitamin E 200 mg/kg + katuk leaf extract 150 g/kg), C (Vitamin E 200 mg/kg + katuk leaf extract 175 g/kg), and D (Vitamin E 200 mg/kg + katuk leaf extract 200 g/kg). The results of the F-test (ANOVA) showed that the addition of Vitamin E and katuk leaf extract had a significant effect on all reproductive parameters of female saline tilapia. The best results were obtained in treatment C with gonadal maturity stage IV (TKG IV), specific growth rate (SGR) for length of 0.653%, SGR for weight of 1.55%, gonadosomatic index (GSI) of 4.28%, egg diameter of 2.12 mm, fecundity of 3798 eggs, hatching rate (HR) of 0.81%, and larval survival rate (SR) of 0.83%. Water quality parameters during the study were within the optimal range (temperature 26-31°C, pH 7-8.4, salinity 20 ppt, and dissolved oxygen 5.2-6.9 mg/L).

Keywords: Fecundity, katuk leaf, *Oreochromis niloticus*, reproduction, vitamin E.