

ABSTRAK

Ikan nilem merupakan komoditas yang banyak digemari masyarakat. Produksi dan penyediaan benih merupakan salah satu kegiatan untuk memenuhi permintaan pasar. Ketersediaan benih sangat bergantung pada proses distribusi benih. Distribusi ikan umumnya dilakukan dengan cara transportasi tertutup. Permasalahan dalam transportasi tertutup adalah perubahan kualitas air yang dihasilkan dari metabolisme ikan selama transportasi. Upaya yang dilakukan untuk memperbaiki kualitas air yaitu dengan penambahan zeolit dalam transportasi tertutup, yang bertujuan untuk mengetahui dosis yang efektif terhadap sintasan benih ikan nilem selama transportasi tertutup. Benih yang digunakan dengan ukuran berat sekitar 0,7-0,9 g/ekor dan panjang berkisar antara 3-5 cm. Penelitian ini menggunakan rancangan acak lengkap dengan 4 perlakuan penambahan zeolit (dosis 0,10,20 dan 30 g) dan 4 kali ulangan. Hasil penelitian, menunjukkan adanya kenaikan sintasan benih ikan nilem seiring dengan bertambahnya dosis zeolit. Sintasan pasca transportasi yang dihasilkan pada 0g zeolit; 98.75%, 10 g zeolit; 99.31%, 20g zeolit; 99.58%, dan 30g zeolit; 99.86%. Sintasan tertinggi pasca transportasi selama 5 jam ada pada penambahan dosis zeolit 30g sebesar 99.86%. Sintasan pasca pemeliharaan yang dihasilkan pada 0g zeolit; 94.77%, 10g zeolit; 96.57%, 20g zeolit; 97.41% dan 30g zeolit; 98.52%. Sintasan pasca pemeliharaan tertinggi ada pada penambahan zeolit 30g sebesar 98.52% . Dosis zeolit antara 10-30g dapat menurunkan amonia sebesar 0,25 mg/L pada kepadatan 60 ekor/L.

Kata kunci: Benih ikan nilem; transportasi sistem tertutup; zeolit; sintasan.

ABSTRACT

Nilem fish is a commodity that is popular with the community. Production and provision of seeds is one of the activities to meet market demand. The availability of seeds is very dependent on the seed distribution process. Fish distribution is generally carried out by closed transportation. The problem in closed transportation is the change in water quality resulting from fish metabolism during transportation. Efforts are being made to improve water quality by adding zeolites in closed transportation, which aims to determine the effective dose of patchouli seed survival during closed transportation. The seeds are used with a weight of about 0.7-0.9 g/fish and a length ranging from 3-5 cm/fish. This study used a completely randomized design with 4 additional zeolite treatments (doses of 0.10, 20 and 30 g) and 4 replications. The results showed that the survival rate of Nilem fish increased along with the increasing dose of zeolite. Post transport survival is generated at 0g zeolite; 98.75%, 10 g zeolite; 99.31%, 20g zeolite; 99.58%, and 30g zeolite; 99.86%. The highest survival rate after transportation for 5 hours was at the addition of zeolite 30g dose of 99.86%. Post-maintenance survival was generated at 0g zeolite; 94.77%, 10g zeolite; 96.57%, 20g zeolite; 97.41% and 30g zeolite; 98.52%. The highest post-maintenance survival was in the addition of zeolite 30g of 98.52%. Zeolite doses between 10-30g can reduce ammonia by 0.25 mg/L at a density of 60 fish/L.

Key words: Nilem fish seeds; closed system transport; zeolite; survival rate.

