

**PELLET STABILITY TEST AND FEEDING  
RESPONSE OF *Oreochromis* sp. (Linnaeus, 1785)  
JUVENILES**

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PELLET STABILITY TEST AND FEEDING RESPONSE OF *Oreochromis* sp.  
(Linnaeus, 1785) JUVENILES

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**Pellet stability test and feeding response of *Oreochromis* sp. (Linnaeus, 1785)  
juveniles**

**ABSTRACT**

Pellet stability need to be highlighted in feed formulation as stable pellet ensure maximum feed utilization that necessary for growth of the cultured fish and also reduced waste in tank that can deteriorate water quality. Two characteristics have been addressed in pellet stability which is floating time and swelling. Five formulations feed with different level of Carbomethyl Cellulose (CMC) binder named; 0.0%, 0.5%, 1.0%, 1.5% and 2.0% and 30 samples collected randomly to undergo floating time test and swelling test. Formulation with 2.0% CMC inclusion showed longest floating ( $8.23\pm2.03$ ) time and minimum swelling pellet ( $11.33\pm1.08$ ). Feeding trial to observe *Oreochromis* sp. juveniles toward formulated pellet compared to commercial feed.

Abstrak tesis disediakan untuk Senat Universiti Malaysia Terengganu sebagai keperluan kepada keperolehan Sarjana Sains.

## ABSTRAK

Kestabilan pellet perlu dititikberatkan dalam penghasilan makanan formulasi kerana pellet yang stabil menjamin penggunaan makanan maksimum yang penting untuk pertumbuhan ternakan ikan serta mengurangkan bahan buangan yang akan menjatuhkan kualiti air. Dua faktor penting telah dikenalpasti untuk kestabilan pelet iaitu masa terapung dan pengembangan. Lima formulasi dengan lima tahap kemasukan Carbomethyl Cellulose (CMC) iaitu; 0.0%, 0.5%, 1.0%, 1.5% and 2.0%. 30 sampel dipilih secara rawak bagi menjalani kedua-dua ujian. Formulasi dengan 2.0% CMC mempunyai masa terapung maksimum dan juga pengembangan pelet paling minimum. Cubaan makanan juga dilakukan bagi mengkaji tarikan juvenile *Oreochromis* sp. terhadap makanan formulasi berbanding makanan ikan komersial.