

Stocking Density for Nursery Production of Redclaw Crayfish, *Cherax quadricarinatus*, in a Recirculating System

G. M. GARCÍA-ULLOA¹, M. R. PÉREZ-MORENO¹,
D. RODRÍGUEZ-GONZÁLEZ², M. C. GALLO-GARCÍA¹,
J. T. PONCE-PALAFIX³, H. RODRÍGUEZ-GONZÁLEZ⁴, and
A. M. GÓNGORA-GÓMEZ⁴

¹Laboratorio de Ciencias Marinas, Universidad Autónoma de Guadalajara, Barra de Navidad, Jalisco, México

²Facultad de Medicina Veterinaria y Zootecnia, Universidad Nacional Autónoma de México, México

³Centro Nayarita de Innovación y Desarrollo Tecnológico A.C. and Escuela Nacional de Ingeniería Pesquera-CBAP-Universidad Autónoma de Nayarit, Tepic, Nayarit, México

⁴Centro Interdisciplinario de Investigaciones para el Desarrollo Regional Integral Unidad Sinaloa, Instituto Politécnico Nacional, Guasave, Sinaloa, México

*Redclaw crayfish, *Cherax quadricarinatus*, early juveniles were reared at different stocking densities in a closed recirculation system using 12-L plastic containers as rearing tanks. Initial stocking densities were 1.0, 1.5, 2.0, 2.5, and 3.0 per liter (66, 89, 111, 133, and 156 crayfish/m², respectively). Rearing period was 42 days. Each density was tested with five replicates. Shelter (0.112 m²) was added to double the surface area of rearing tanks. Animals were fed ad libitum twice a day with a commercial diet containing 35% crude protein. There were no significant differences ($P < 0.05$) in length and specific growth rate (SGR) among stocking densities. Final weight and daily weight gain, however, were significantly higher at the density of 66 per m² (1.0 per liter). Total biomass at harvest increased with density. Survival was affected by stocking density from day 28 onward, decreasing with density from $62.7 \pm 7.6\%$ obtained at 66 crayfish/m² to $44.85 \pm 8.18\%$ at 156 crayfish/m².*