

Effect of triploidization on juvenile African catfish (*Clarias gariepinus*)

ABSTRACT

Triploid African catfish (*Clarias gariepinus*) produced through cold shock 3 min post fertilization were compared to diploid offspring of the same parentage at 66 days of age. Triploid fish were significantly shorter (11%) and weighed less (18%) than diploids but showed no significant difference in mortality or cannibalism, which can be an important source of losses under aquaculture conditions. Erythrocytes of triploid fish were more oval shaped than the normal spherical shape of diploid erythrocytes, were significantly larger (38%) and had nuclei that were significantly larger (25%) than observed in diploid fish. Erythrocyte morphological characteristics show potential as an indicator for the detection of triploidy in African catfish.

Keyword: Triploid, *Clarias gariepinus*, Cannibalism, Red blood cell