

The use of an industrial enzyme, Maxatase, to eliminate the adhesiveness of *Clarias gariepinus* (Burchell) eggs

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Abstract

The fertilized eggs of the African catfish (*Clarias gariepinus* Burchell) adhere to substrates by an adhesive disc. This adhesive disc is deposited at the animal pole by the granulosa cells on the zona radiata. Activation of the stickiness occurs during and after the hydration of the fertilized egg, i.e. during the formation of perivitelline space. The eggs have to be incubated in monolayers in trays. This method requires much space and is sensitive to fungal infections. Therefore, several techniques to eliminate the stickiness of the catfish eggs have been tried out. Only the use of an industrial proteolytic enzyme preparation, Maxatase LS SORT (Gist-Brocades NV, Delft, The Netherlands) proved to be successful. Optimal results (100% free eggs, 71.6% normal larvae) were obtained with an application of 0.223% Maxatase during 90s.