

Article

Production of hyaluronic acid by *Streptococcus zooepidemicus* on protein substrates obtained from *Scyliorhinus canicula* discards

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Received: / Accepted: / Published:

Abstract: This work investigates the production of hyaluronic acid (H) by *Streptococcus equi* subsp. *zooepidemicus* in complex media formulated with peptones obtained from *Scyliorhinus canicula* viscera by-products. Initially, in batch cultures the greatest productions were achieved using commercial media (3.03 g/L) followed by peptones from alcalase hydrolysed viscera (2.32 g/L) and peptones from non-hydrolysed viscera (2.26 g/L). An increase of between 12-15% was found in subsequent fed-batch cultures performed on waste peptones. Such organic nitrogen sources were shown to be an excellent low-cost substrate for microbial AH saving more than 50% of nutrient costs.