



Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

Age and growth determination



Centurion
UNIVERSITY

*Shaping Lives
Empowering Communities*

Crustaceans, a commercially important class of arthropods in fisheries and aquaculture, represent a major worldwide food component for human consumption.



Centurion
UNIVERSITY

*Shaping Lives
Empowering Communities*

Recently, growing interest

regarding the ageing and longevity of crustaceans
has led to advancement in the field of age
determination

methods, including the use of lipofuscin and
growth band counts, veering from the classic
approach

of size modal analysis.



Centurion
UNIVERSITY

*She qui Vivis
Empowering Communities*

This manuscript provides a comprehensive overview of literature published between 1990 and 2016 on popular age determination methods (length–frequency analysis, lipofuscin analysis, and growth band counts) applied to five main crustacean taxa (shrimp, krill, crayfish, crabs and lobsters).



Centurion
UNIVERSITY

*Shaping Give
Empowering Communities...*

Of the 231 studies examined, 83% used length–frequency analysis, 13% used lipofuscin and 4% used growth bands.

Validation, a necessary step to support results provided by age estimation studies, was included in 71% and 56% of the reviewed published papers that used lipofuscin and growth band counts, respectively.



Centurion
UNIVERSITY

*Shaping Lives,
Empowering Communities...*

So far, growth band counts have

been the only direct method of determining crustacean age.

This method requires validation in all species before routine application in stock assessment and/or conservation purposes.