## WKMIAS2 - Workshop on Micro increment daily growth in European Anchovy (*Engraulis encrasicolus*) and Sardine *(Sardina pilchardus*)

## 2015/2/SSGIEOM16

A Workshop on Micro increment daily growth in European Anchovy (*Engraulis encrasicolus*) and Sardine (*Sardina pilchardus*), (WKMIAS2), chaired by Carmen Piñeiro\*, Spain and XX, XX) will meet at Vigo/Málaga (Spain) in October-November 2017 to:

- a) Review the validation work done, based on daily ring formation;
- b) Define and standardize the daily age reading criteria among areas;
- c) Validate methods for the identification of the first annulus in young of the year anchovy and sardine in different areas;
- d) Estimate precision and accuracy of age estimates by micro-increment counts;
- e) Improve the reference collection of otoliths created in the WKMIAS and start a new collection of age-known otolith images;
- f) Evaluate the reliability of new age assignment techniques (i.e. discriminant functions analysis).

WKMIAS2 will report by December 2017 to the attention of ACOM, SCICOM and WGBIOP.

## Supporting information

Priority:	Daily growth studies are used to analyze the effects of environmental parameters on growth and survival, and thus can understand the recruitment processes. Also are used as validaton method of the annual growth. In order to arrive at appropriate management advice ageing procedures must be reliable. Daily age determinantion is thus of outmost importance to understand population dynamics. Consequently, these activities are considered to have a very high priority.
Scientific justification and relation to action plan:	Based on the main results from previous ICES workshops on ageing adult anchovy and sardine and otholith exchanges (WKARA 2009, WKARAS 2011, Anchovy Exchange 2014), to correctly identify the right position of the first ring (annulus) on sagittal otoliths of these species has been one of the main sources of error affecting ageing precision. Improving precision in age reading is extremely important in general, even more in short-lived species such as anchovy and sardine. One of the most common methods to validate the timing and position of the first ring consists of counting of otolith microincrements (daily rings) in juveniles (young-of-the-year). Daily growth studies of anchovy and sardine are currently carried out in different European laboratories, principally to analyze the effects of environmental parameters on growth and survival, and thus to understand the influence of some environmental factors in the recruitment processes of these species. However, given the wide span of methodologies already existing within laboratories, ageing data are often difficult to compare, actually masking the contribution of environmental variables to the observed growth rate patterns in the different areas. The aim of the workshop is to collate the existent different protocols on microincrement counting as starting point to produce a single validated and agreed protocol to better standardize age estimates, either on a daily ring or a an annual ring basis.
Resource requirements:	None.
Participants:	Participants will be experts in microincrement daily growth.
Secretariat facilities:	None.
Financial:	None.
Linkages to advisory committee:	АСОМ

Linkages to other committees	WGBIOP, WGHANSA, SCICOM
or groups:	
Linkages to other organizations cost:	None.