Fish aging - general

Fish aging is an important biological tool, which has many useful applications especially in fisheries management and also in Aquaculture especially in hatchery management. Several methods are used in fish aging that include the reading of scales, opercula, otolith or vertebrae

Some methods are often used due to its simplicity (scale reading) while other methods may require sacrificing the fish being aged (otolith or vertebrate)

Abdel Rahman El Gamal

Fish aging – Scale reading

Using scale reading is based on the difference in growth pattern of fish during various seasons in regard to temperature

In temperate regions, fish grow better during warm summer while their growth declines and may even ceases during cold winter. The growth pattern is reflected on the scales as a result of the metabolism of calcium and phosphorous resulting in a wide and narrow growth zones in summer and winter, respectively. The variation in growth zones enables the reading of year marks and hence determines the age of fish

Dissecting microscope with magnification power of X (25 and 50) is used for the scale reading

Other aging methods will be needed for scaleless fish. Also, in regions whereas fish grow in the same manner all-year round, the scale reading is not the appropriate aging method. Instead, other aging methods are recommended including opercula, otolith or vertebrae methods

Abdel Rahman El Gamal