Structure and development of the egg of the glossiphoniid leech Theromyzon rude: Characterization of developmental stages and structure of the early uncleaved egg

Fernandez,

Olea,

Matte,

Some aspects of the reproductive biology of the glossiphoniid leech, Theromyzon rude, under laboratory conditions, and the staging and structure of its uncleaved egg were studied. Sexually mature animals form breeding communities and fertilization occurs in the ovisacs, presumably around the time of egg laying. Oviposition may be postponed for hours or days, but the eggs in the ovisacs remain blocked at first meiotic metaphase. Development of the uncleaved egg, from the time of oviposition to completion of the first cleavage division, has been subdivided into six stages. At 20°C, the six developmental stages take 5-6 h. Characterization of the stages is based on observations of both live and fixed/cleared eggs. Discharge of the first pole cell, by the end of state 1a, is associated with the movement of a ring of contraction between the equator and the animal pole. Discharge of the second pole cell, by the end of stage 1b, is accompanied by contraction of the animal hemisphere which bec