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der Darmzellen (GRANDJEAN in Vorbereitung) sowie der praktisch noch unbekanntem Rolle der Hämocyten können wichtige Aufschlüsse in bezug auf den Proteinmetabolismus dieser Zellen bringen. Somit würden auch die der Vitellogenese vorangehenden Fragen nach der Synthese und dem Transport der Proteine geklärt werden.

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Résumé

Les aspects dynamiques de la vitellogénèse de la tique *Ornithodoros moubata*, spécialement en ce qui concerne la synthèse du vitellus protéique et la formation de l'enveloppe de l'œuf, sont étudiés au niveau de l'ultrastructure à l'aide de trois marqueurs protéiques (la leucine tritiée comme précurseur, la ferritine et la peroxidase).

Il ressort des expériences qu'à la suite d'un repas sanguin et de la fécondation d'une tique femelle *Ornithodoros moubata* les performances endogènes de l'ovocyte sont plus importantes au début, c'est-à-dire que les protéines sont synthétisées par des structures de la cellule elle-même (stade A). Dans une phase suivante, l'ovocyte forme des microvilli (AESCHLIMANN & HECKER, 1967 et 1969). L'ovocyte commence alors à résorber par pinocytose des protéines de l'hémolymph, formées principalement au niveau de l'intestin moyen (stade B). Cette source exogène de protéines complète et dépasse même par la suite de la vitellogénèse la synthèse endogène des protéines de l'ovocyte.

Dans l'œuf mûr, le vitellus protéique est d'origine principalement endogène dans le centre de la cellule, tandis qu'il est surtout d'origine exogène dans les parties périphériques. L'enveloppe de l'œuf est formée par l'incorporation et la juxtaposition de protéines provenant de l'hémolymph, dans la zone des microvilli.

La synthèse du glycogène commence très tôt, dès le début de la synthèse des protéines. Le glycogène est métabolisé pour former le vitellus complexe qui contient des hémoglyco-lipo-protéines (DIEHL, 1970), mais il est aussi mis en réserve pendant les phases avancées de la vitellogénèse sous forme de glycogène α qu'on trouve, ainsi que des lipides, inclus entre les grosses sphères vitellines.

Summary

Dynamic aspects of vitellogenesis in *Ornithodoros moubata*, particularly the synthesis of yolk proteins and the development of the eggshell, were studied using the electron microscope by means of three protein tracers (3H-Leucine as a protein precursor, Ferritin and Peroxidase). The results showed that following a blood meal and a copulation of the female *O. moubata* the endogenous activity of the oocytes predominates at the beginning of yolk deposition which means that the