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ABSTRACTS**



## Revealing Silurian secrets: Chelicerate arthropods from the Kalana Lagerstätte, Estonia

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The Kalana Lagerstätte in Central Estonia offers a unique glimpse into the shallow-water environment of the early Silurian (Llandovery, Aeronian, Raikküla Regional Stage) within the Baltic Palaeobasin. What sets Kalana apart is the exceptional preservation and detail of organisms rarely found in the fossil record. The biota is dominated by exquisitely preserved algae, including various uncalcified dasyclad species such as *Palaeocymopolia silurica*. Additionally, the site has yielded fossils of the agnathan vertebrate *Kalanaspis delectabilis* and beautifully preserved crinoids. These Silurian algal forests provided a habitat not only for well-known crinoids and fishes but also for a diverse array of arthropods. Among these are the oldest chelicerate fossils in Estonia, including specimens like the juvenile *Eurypterus tetragonophthalmus*, the large *?Erettopterus osiliensis*, the tiny *Bunodes lunula*, and numerous yet unidentified specimens. These chelicerates offer valuable insights into early Silurian marginal-marine ecosystems, helping to illuminate their distribution, palaeoecology, and the broader marine community of that era. By examining the chelicerate fossils from Kalana, we aim to identify these species and enhance our understanding of this specific ecosystem. This will allow us to reconstruct the palaeobiology of these ancient creatures and clarify their role within the Silurian marine environment.