



Supplementary figure 1. Artistic reconstruction of two alate females of †*Zigrasimecia* sp.

Supplementary table 1. Summary of studies related to the preservation of fossilized internal organs (present study marked in yellow).

Publications	Place of origin	Animal	Method	Internal structure				Reproductive system
				Nervous System	Digestive System	Muscular System	Exocrine System	
Present Study	Kachin	Ant	Micro-CT	✓	✓	✓	✓	✓
Boudinot et al., 2022	Kachin	Ant	Micro-CT	✓	✓	✓	✓	
Xing et al., 2021	Kachin	shrimp	Synchrotron and Micro-CT	✓	✓			
Li et al., 2021	Kachin	Coleoptera	Micro-CT			✓		
Wang et al., 2020	Kachin	Ostracods	Micro-CT					✓
Grimaldi et al., 2019	Kachin	wasp	Micro-CT			✓		
Pohl et al., 2010	Baltic	Mengea	Synchrotron X-ray	✓	✓	✓		✓
Heethoff et al., 2009	Dominican	Oribatida	Synchrotron X-ray			✓		✓
Grimaldi et al., 1994	Dominican & Baltic	Hymenoptera, termites, beetles, gnats, flies	SEM & TEM	✓		✓		
Henwood, 1992a	Dominican	fly & beetles	SEM & TEM			✓		
Henwood, 1992b	Dominican	coleopteran	SEM & TEM			✓		
Poinar, 1992	Canadian	wasp	TEM			✓		
Poinar and Hess, 1982	Baltic	gnats	TEM			✓		
Poinar and Hess, 1985	Baltic	fly	TEM			✓		
Mierzejewski, 1976	Baltic	fly	SEM	✓				
Petrunkewitch, 1935	Baltic	fly	Microscope			✓		
Kornilowitsch, 1903	Baltic	Diptera and Neuroptera	Microscope			✓		