

SUPPLEMENTARY INFORMATION

Ecology and biogeography of megafauna and macrofauna at the first known deep-sea hydrothermal vents on the ultraslow-spreading Southwest Indian Ridge

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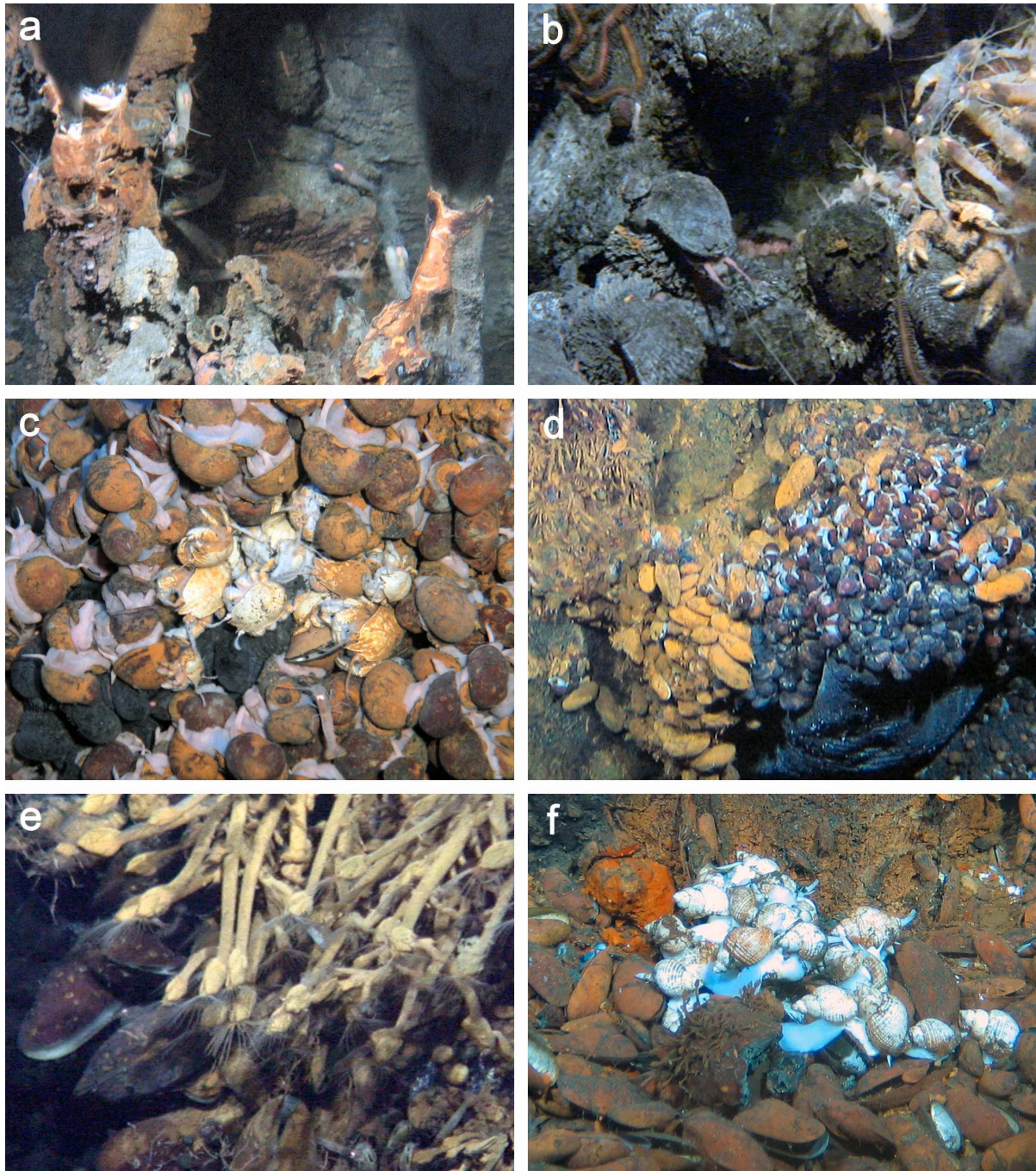
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SUPPLEMENTARY FIGURE: Images of faunal assemblages observed at Longqi vent field, Southwest Indian Ridge, during the first remotely operated vehicle (ROV) dives in November 2011: (a) active “black smoker” chimneys occupied by *Rimicaris kairei*; (b) assemblage of *Chrysomallon squamiferum*, *Hesiolyra* cf. *bergi*, *Kiwa* n. sp. “SWIR”, *Mirocaris fortunata* in close proximity to vent fluid source; (c) abundant *Chrysomallon squamiferum* and *Gigantopelta aegis*, with *Kiwa* n. sp. “SWIR”, *Bathymodiolus marisindicus*, and *Mirocaris fortunata* on platform of “Tiamat” vent chimney (d) zonation of *Chrysomallon squamiferum*, *Gigantopelta aegis*, *Bathymodiolus marisindicus*, and *Neolepas* sp. 1 with distance from actively venting beehive diffuser; (e) transition between aggregations of *Bathymodiolus marisindicus* and *Neolepas* sp. 1; (f) aggregation of *Phymorhynchus* n. sp. “SWIR” associated with dead mussel shells at base of active vent chimney.

Arthropoda	Malacostraca	Tanaidacea	Colletteidae	<i>Leptognathiella fragilis</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Arthropoda	Malacostraca	Tanaidacea	Leptocheilidae	<i>Mesotanais styxis</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Arthropoda	Malacostraca	Tanaidacea	Nototanaidae	<i>Obesutanais sigridi</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Arthropoda	Malacostraca	Tanaidacea	Typhlotanaidae	<i>Typhlotanais incognitus</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Echinodermata	Asterozoa		Paulasteridae	<i>Paulasterias tyleri</i>	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Echinodermata	Ophiurozoa		Ophiuridae	<i>Ophioctenella acies</i>	0	0	0	0	0	1	1	1	1	1	1	1	0	0
Echinodermata	Holothurozoa		Chiridotidae	<i>Chiridota</i> sp.	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Echinodermata	Holothurozoa		-	Apodacean sp.	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Chaetognatha	Sagittozoa		Spadellidae	<i>Calispadella alata</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Chordata	Actinopteri		Synphobranchidae	<i>Ilyophis saldanhai</i>	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Chordata	Actinopteri		Lotidae	<i>Gaidropsaurus</i> sp.	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Chordata	Actinopteri		Zoarcidae	<i>Pachycara thermophilum</i>	0	0	0	0	0	0	0	1	1	1	0	1	0	0
Chordata	Actinopteri		Zoarcidae	<i>Pachycara saldanhai</i>	0	0	0	0	0	1	1	0	0	0	0	0	0	0
Total species at each vent field:					21	35	9	21	4	47	23	18	17	25	20	32	12	14