



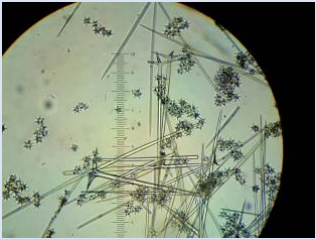
Table S1 List of publications (1981-2022) reporting isomalabaricane triterpenes and derivatives from marine sponges (sorted by date).


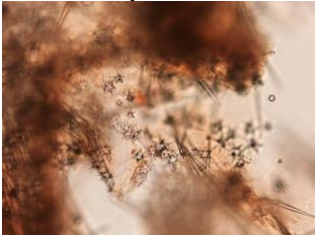

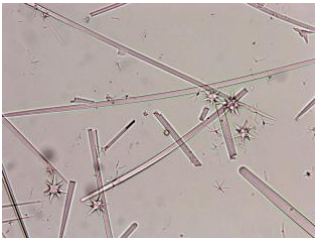
Original species identification. Lines in light green, vouchers originally identified as *Jaspis*. Lines in light blue, vouchers originally identified as *Stelletta*. Lines in light purple, vouchers originally identified as *Geodia*. Lines uncolored, vouchers originally identified as *Rhabdastrella*.



Compounds. In bold, new compounds reported. In black, isomalabaricane triterpene compounds; **in red**: sterols; **in green**: other types of compounds.

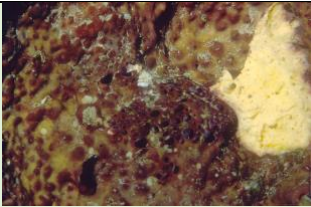
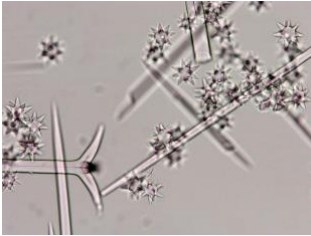

Abbreviations: CASIZ: California Academy of Sciences Invertebrate Zoology, San Francisco, CA, USA; CRRF: Coral Reef Research Foundation, Palau; GBR: Great Barrier Reef, E. Australia; IRD: Institut pour la Recherche et le Developpement, Nouméa, New Caledonia; PDZ, University of Utah collection, Salt Lake City, USA; QMG: Queensland Museum, Brisbane, Australia; UCMPW, University of California Museum of Paleontology, Berkeley, CA; USP, Regional Herbarium, School of Pure and Applied Sciences, University of the South Pacific, Fiji; WAM: Western Australian Museum; ZMAPOR: Amsterdam Porifera collection, now stored at Naturalis, Leiden, The Netherlands.

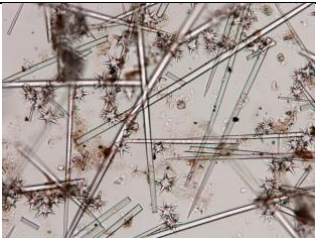
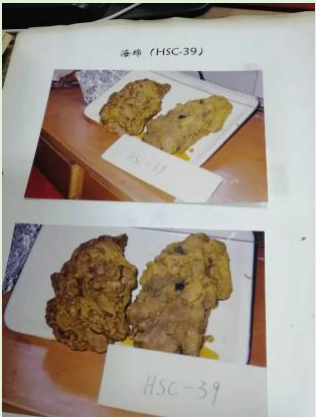
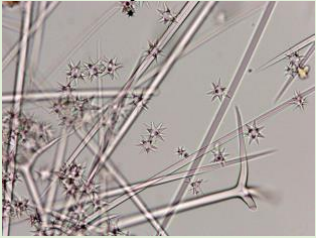
Original species identification in ref.	Locality	Compounds	Sponge identifier and ref.	Description in ref.	Voucher	Revised Identification	Authorship of revised identification
<i>Jaspis stellifera</i>	Suva, Fiji	Stellettins ?, B, G (B and G named retrospectively)	- Ravi, Wells & Croft (1981)	Ext: chocolate brown, Int: butter-color to intense yellow	-	<i>R. globostellata</i>	Kennedy (2000)
<i>Jaspis stellifera</i>	Heron Island, GBR	4 triterpenes including stelliferin A-like	- Ravi & Wells (1982)	-	-	<i>R. globostellata</i>	Kennedy (2000)
<i>Stelletta</i> sp.	Mogadishu, Somalia	Stellettin B	P. Bergquist, McCabe et al. (1982)	Ext: brown, Int: yellow	-	<i>R. globostellata</i>	This study (based on color)
<i>Jaspis stellifera</i>	Ishigaki Island, Okinawa, Japan	Stelliferins A-F	Jane Fromont, Tsuda et al. (1991)	Ext: brown, Int: bright yellow	-	<i>R. globostellata</i>	Kennedy (2000) and Jane Fromont, (pers. com).
<i>Stelletta tenuis</i>	Hainan, South China Sea	Stellettin A (yellow pigment)	Jin-He Li, Su et al. (1994)	-	#91-6 (not seen in this study)	<i>R. globostellata</i>	This study (based on identifier and authors)
<i>Stelletta globostellata</i>	Mage Shima Island, Japan	Globostellatic acids A-D 9-hydroxystelliferin D, 3-<i>epi</i>-29-hydroxystelliferin E, 3-<i>epi</i>-29-hydroxystelliferin A	Rob van Soest, Ryu et al. (1996) Oku et al (2000)	-	ZMA POR 11016 (slide ZMAPOR P2724)	<i>R. globostellata</i>	This study (slide examined + deck picture)

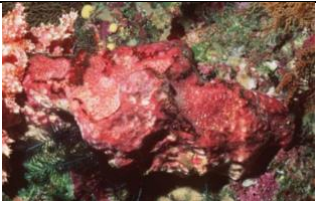

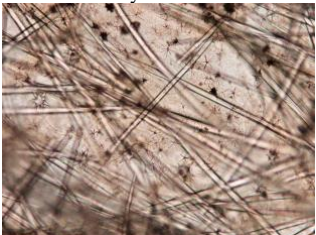
					 <p>Picture courtesy from R. van Soest</p>  <p>Picture from spicule slide</p>		
<i>Jaspis stellifera</i>	Ishigaki Island, Okinawa, Japan	Jaspiferals A-G*	Jane Fromont, Kobayashi et al. (1996)	Ext: brown	-	<i>R. globostellata</i>	Kennedy (2000) and Jane Fromont, (pers. com).
<i>Stelletta</i> sp.	Cape Wilberforce, North Australia	Stellettins C-F, stellettins A-B, stellettin G	Shirley Pomponi McCormick et al (1996), McKee et al., (1997)	Spherical, Ext: brown- purple, Int: brown yellow	Q66C4702 (Smithsonian)  <p>Picture from spicule slide, courtesy of C. Castello-Branco</p>	<i>R. globostellata</i>	This study (based on description and pictures of the spicules sent by the Smithsonian NMNH)
<i>R. globostellata</i>	Hainan Island, South China Sea	Rhabdastrellic acid-A (= <i>E</i> isomer of stellettin G)	Rob van Soest, Rao et al (1997)	yellow	SS301 = ZMAPOR 12451 (slide ZMAPOR P2703)	ID confirmed (‘brain’ morphotype)	This study (slide examined + deck picture)


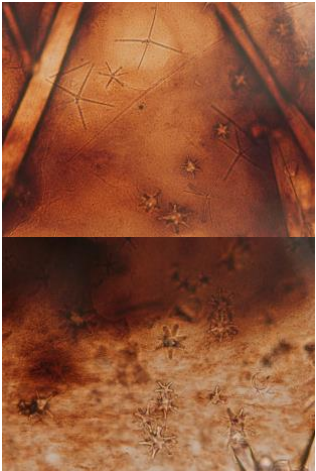
					 <p>Picture courtesy from R. van Soest</p>  <p>Picture from spicule slide</p>		
<i>R. globostellata</i>	New Caledonia	Aurorals 1-4	Claude Lévi, Bourguet-Kondracki et al. (2000)	-	<p>IRD R1481</p>  <p>Picture courtesy from C. Debitus</p> 	ID confirmed	This study (slide examined)


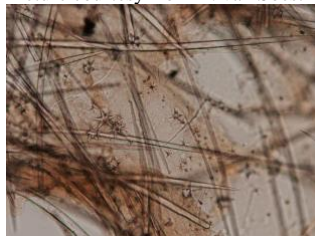
					Picture from spicule slide		
<i>Jaspis</i> sp.	Emae, Vanuatu Islands	Globostellatic acid E, 3-O-acetyljaspiferal B–D and G, jaspiferoic acids A–B dimethyl esters, globostellatic acids B–C	John N. A. Hooper, Zampella et al. (2000)	-	QMG 306893 = IRD R1624  Pictures of spicules: cf. Kennedy, 2000, Fig. 7)	<i>R. globostellata</i>	Kennedy (2000) and this study (pictures of spicules)
<i>Geodia globostellifera</i>	Vanua Levu, Fiji	Stelliferin A riboside (=3- <i>Epi</i> -stelliferin A 22- α -ribopyranoside), stellettins A-B	John N. A. Hooper, Tabudravu & Jaspars (2001)	-	USP 9712SD114  Picture from spicule slide	<i>R. globostellata</i>	Mary Kay Harper in Tasdemir et al. (2002) and Cárdenas et al. (2011), specimen examined and barcoded (COI).
<i>Geodia japonica</i>	Xisha Island, Hainan, South China Sea	geoditins A–B* , stellettins A–B, 26-methylergosta-5,24(28)-dien-7-one-3-ol , 24(28)dehydroaplysterol , 24-methylenecholesterol , <i>cyclo</i> (<i>S</i> -leucyl- <i>S</i> -prolyl), <i>palmitic acid</i> , <i>malonic acid</i>	Li Chupu, Zhang & Che (2001) + see activity of Stellettin A (Liu et al., 2005; 2006; 2012)	-	ZWH95004 (lost, Prof. Jun Xu, pers. comm.)	<i>Geodia</i> sp.	This study (<i>G. japonica</i> is a temperate, cold water species so this is probably a mis-identification).
<i>Jaspis</i> sp.	Vava'u, Tonga, South Pacific	29-hydroxystelliferin E, 29-hydroxystelliferin A, stelliferin G, 3-<i>epi</i>-29-hydroxystelliferin E	Michelle Kelly, Meragelman et al. (2001)	-	CRRF 0CDN5445-C = CASIZ 300204	<i>R. globostellata</i>	Michelle Kelly in Tasdemir et al. (2002)


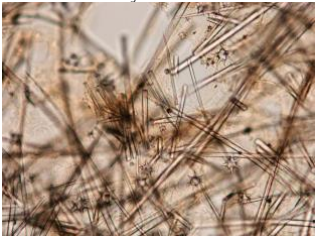

					 <p>Picture courtesy of CRRF</p>		
<i>R. globostellata</i>	Mindanao, Philippines	Stellettins H–I , stellettins A–D, (–)-stelettin E, rhabdastrellic acid-A	Mary Kay Harper, Tasdemir et al (2002)	-	PDZ ₁ 98-1-10 (University of Utah)  <p>Picture from spicule slide</p>	<i>Rhabdastrella</i> cf. <i>globostellata</i>	Cárdenas et al. (2011), specimen examined and barcoded (COI).
<i>R. aff. distincta</i>	Hainan Island, South China Sea	Isogeoditin A , 13-(E)-isogeoditin A , isogeoditin B , 22,23-dihydrostellettin B , geoditins A–B, stellettins A–C, E, rhabdastrellic acid-A Rhabdastrellins A–F , stellettins L–M	Rob van Soest, Lv et al. (2004) Lv et al. (2008)	-	HS-14 (Peking University) = ZMAPOR 2717 (slide ZMAPOR P16728)  <p>Picture courtesy from R. van Soest</p>	<i>R. globostellata</i>	This study (slide examined + deck photo)

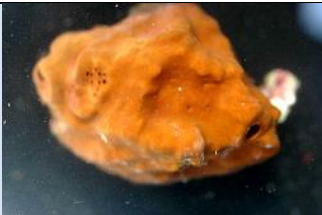


					 <p>Picture from spicule slide</p>		
<i>Jaspis</i> sp.	Sanya, Hainan, South China Sea	22,23-dihydrostellettin D Jaspolides A–F Jaspolides G–H (bisisomalabaricane)	Rob van Soest? Tang et al. (2005) Tang et al. (2006) Tang et al. (2007)	-	HSC-39  <p>Picture courtesy of Wenhanlin.</p>  <p>Picture from spicule slide</p>	<i>R. globostellata</i>	This study (slide examined)
<i>R. globostellata</i>	Fiji	Stelletins J–K, stelliferin A riboside, 3-epi-29-acetoxystelliferin E	Michelle Kelly, Clement et al. (2006)	picture in Supp. Mat.	CRRF 0CDN4278-K (deposited at NIWA)	ID confirmed (pink morphotype)	This study (picture + voucher examined by M. Kelly)


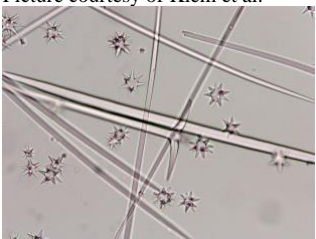


					 <p>Picture from CRRF</p>		
<i>R. globostellata</i>	South Sulawesi, Indonesia	Globostelletin, globostellatic F–M, two new stelliferin A ribosides, globostellatic acids A, D, stelliferin A riboside	Rob van Soest, Fouad et al (2006)	Spherasters I (20-55) Spherasters II (10-15) Oxyasters/tylasters Trichodragmas (100x5-12)	ZMAPOR17166 (slide ZMAPOR P2693)  <p>Picture courtesy from R. van Soest.</p>  <p>Picture from spicule slide</p>	ID confirmed	This study (slide examined + deck photo)
<i>R. globostellata</i>	Pith Reef, GBR	Stelliferin D riboside, stelliferin A, stelliferin A-like	- Agrawal (2007), PhD thesis	-	-	-	-



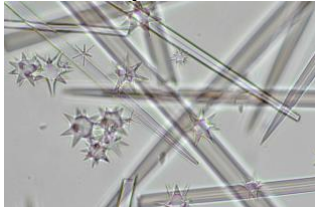
<i>R. globostellata</i>	Sulawesi, Indonesia	Globostellatic acids X methyl ester 1-4, Globostellatic acid F methyl ester, 13E-Globostellatic acid B methyl ester, Acetyljaspiferol E	Nicole de Voogd, Aoki et al (2007)	-	<p>ZMAPOR 15784a (slide ZMAPOR P2697)</p>  <p><i>Rhabdastrella</i> covered with <i>Haliclona (Gellius) amboinensis</i> (Picture courtesy from N. de Voogd)</p>  <p>Pictures from spicule slide</p>	<i>Rhabdastrella</i> sp.	This study (slide examined+ underwater picture)
<i>Stelletta tenuis</i>	Sanya Bay, Hainan, South China Sea	Stellettins L–M, stellettins A–E, stellettin H, rhabdastrellic acid-A, 22,23-dihydrostellettin B, geoditin A 24-methylene-27-methylcholestane-3β,5α,6β-triol, 24-methylene-27-	Jin-He Li, Lin et al. (2007)	-	<p>HN1120-1 (not seen in this study)</p>	<i>R. globostelletta</i>	This study (according to another voucher examined, identified by Jin-He Li as <i>S. tenuis</i>)

		<p>methylcholest-5-ene-3β,7α-diol, 24-methylene-27- methylcholest-5-ene-3β,7β-diol, 24-methylene-27-methylcholest-5-en-3β-ol-7-one, 24-methylene-27-methylcholesterol, 24,25-dimethylcholestane-2β,3α,3α-triyl trisodium sulfate</p>					
<i>R. globostellata</i>	Amami-oshima, Japan	<p>Rhabdastins A–G, Rhabdastoside A (triterpene glycoside)</p>	Rob van Soest, Hirashima et al (2010)	-	<p>ZMAPOR 16401 (slide ZMAPOR P2690)</p>  <p>Picture courtesy from R. van Soest</p>  <p>Picture from the spicule slide</p>	I.D. confirmed (‘brain’ morphotype)	This study (slide examined + deck picture)
<i>R. globostellata</i>	Hainan Island, South China Sea	<p>Globostelletins A–I, jaspolide F, (–)-stellettin E, stellettins C–D rhabdastrellic acid-A</p> <p>Globostelletins J–S</p>	<p>Nicole de Voogd, Li et al (2010)</p> <p>Li et al (2012)</p>	Low res. picture of HSF-10 in article banner	<p>HSF-10 = ZMAPOR 17354 (slide ZMAPOR P2700)</p>	ID confirmed	This study (slide examined)

					 <p>Picture courtesy from Li et al.</p>  <p>Picture from spicule slide</p>		
<i>R.</i> cf. <i>globostellata</i>	Ishigaki Island, Okinawa, Japan	Stelliferins J–N	Jane Fromont, Tanaka et al (2011)	Yellowish-brown, description of spicules	WAM Z59146  <p>Picture from spicule slide</p>	<i>R. globostellata</i>	This study (voucher examined + COI)
<i>Jaspis stellifera</i>	Guangdong, South China Sea	Jaspiferins A–B gibepyrone F, <i>p</i> -hydroxy benzaldehyde, 3-Indole-3-aldehyde, thymine, 24(28)-dehydroaplysterol, (25 <i>S</i>)-26-methylene-cholest-4-en-3-one	- Tang et al (2012)	-	XWS-03 (not seen in this study)	<i>Rhabdastrella</i> sp.	This study (<i>J. stellifera</i> is not found in South China Sea, the compounds indicate it is probably a <i>Rhabdastrella</i>)
<i>Stelletta</i> sp.	Lingshui Bay, Hainan Province, China	Stellettin N , stellettins D, G, H,	Jin-He Li, Xue et al (2013)	-	YAL-37	<i>R. globostelletta</i>	This study (picture)

		Rhabdastrellic acid-A, 22,23-dihydrostellettin D					
					Picture courtesy of Xue et al.		
<i>Jaspis stellifera</i>	South China Sea	Jaspiferins C–F Jaspiferin G isogeoditin A, 13-(<i>E</i>)-isogeoditin A, jaspolide E, 22,23-dihydrostellettin D Jaspiferin H–J , stellettin E, F	Sheng-An Tang, Jin et al (2014) Xu et al (2016) Xu et al (2018)	-	SC20090608 (not seen in this study)	<i>Rhabdastrella</i> sp.	This study (<i>J. stellifera</i> is not found in South China Sea, the compounds indicate it is probably a <i>Rhabdastrella</i>)
<i>Stelletta tenuis</i>	Sanya Bay, Hainan, South China Sea	Stellettins O–P, W¹ , stellettins C–D, gibepyrone C , gibepyrone F ¹ stellettin N was already given to another stellettin by Xue et al. (2013). This one is here renamed stellettin W.	Jin-He Li, Li et al (2015)	-	HN1120-5 	<i>R. globostelletta</i>	This study (voucher examined)
					Picture from spicule slide		
<i>Rhabdastrella providentiae</i>	Con Co, Quang Tri, Vietnam	Rhabdastrellins G–K jaspolide C, globostelletin C, globostelletin D Rhabdaprovidines A–C (formed by bio-chemical degradation of ITTs?) Rhabdaprovidines D–G	Do Cong Thun, Kiem et al (2018) Dung et al. (2018a) Dung et al. (2018b)	picture	HM06.2016-01 	<i>R. globostellata</i> (‘brain’ morphotype)	This study (voucher examined)

					 <p>Picture courtesy of Kiem et al.</p>  <p>Picture from spicule slide</p>		
<i>Stelletta</i> sp.	Cham Island, Vietnam	Cyclobutastellettolides A-B , jaspolide F, globostelletins E-G, K, M Stellettins Q-R , stellettins S-V , globostelletin N	Boris B. Grebnev, Kolesnikova et al. (2019) Kolesnikova et al. (2021)	picture and complete description of spicules	PIBOC O38-301  <p>Picture courtesy of Kolesnikova et al.</p>  <p>Picture from spicule slide</p>	<i>R. globostelletta</i> (‘brain’ morphotype)	This study (voucher examined)

<i>Rhabdatrella</i> sp.	Kenting, Taiwan	Rhabdastin H-I	Hsing-Hui Li, Lai et al. (2021)	picture (not the one published), 18S (lost)	#2017-1221-SP (but wrong voucher)  Picture courtesy of Lai et al.	<i>Rhabdastrella</i> sp.	This study (picture)
<i>R. globostellata</i>	Vanphong Bay, Khanh Hoa, Vietnam	Rhabdaglostelones A-C	- Trang et al. (2022)	COI and 18S markers (in Suppl. Info.)  Picture courtesy of P. V. Kiem  Picture from spicule slide	NCCT-B139 I.D. confirmed ('brain' morphotype)	This study (voucher examined)	