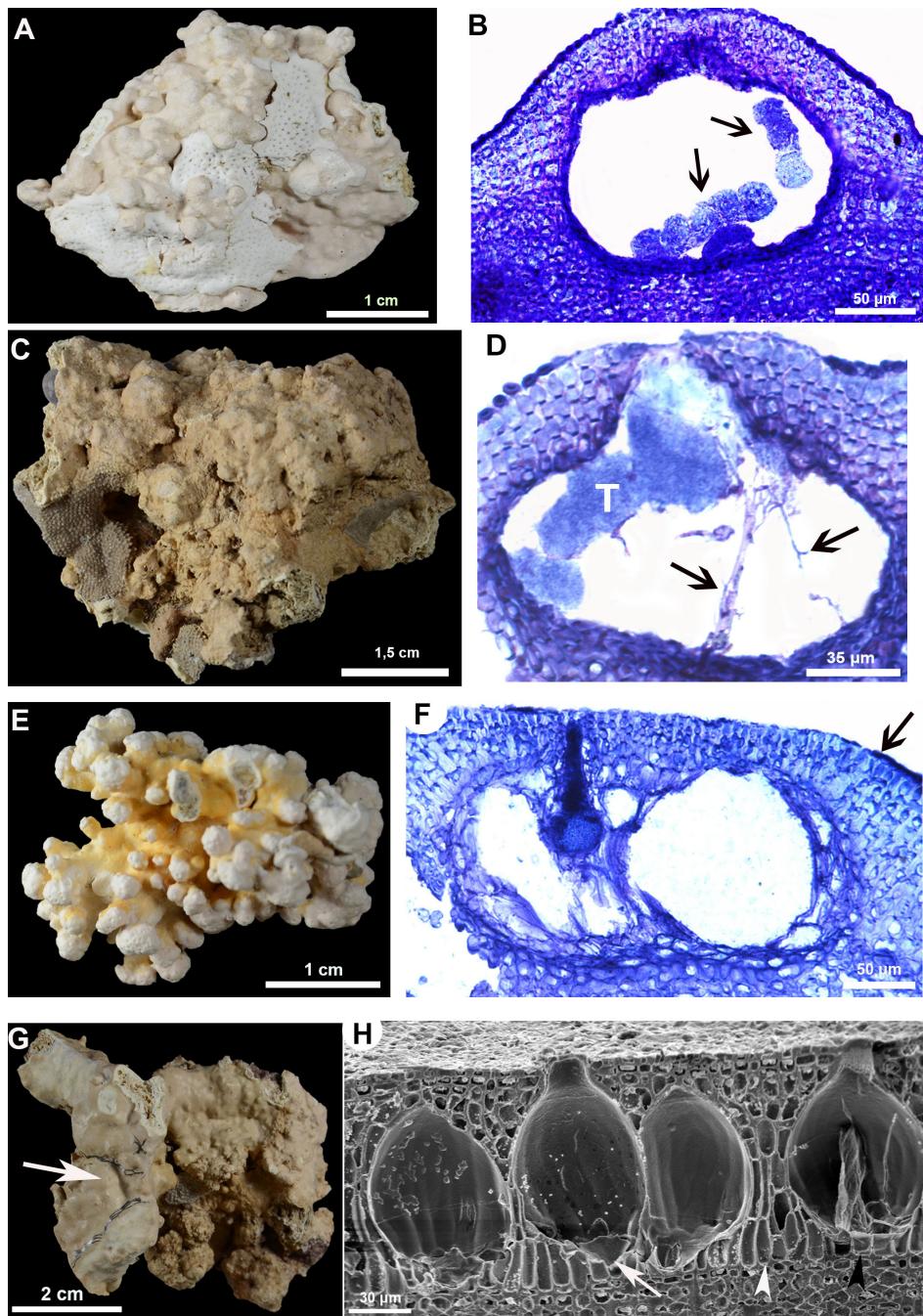


## Supplementary Material - Structure and composition of rhodolith beds from the Sergipe-Alagoas Basin (NE Brazil, Southwestern Atlantic)

Nicholas F.L. Vale <sup>1,2</sup>, Juan C. Braga <sup>2</sup>, Alex C. Bastos <sup>3</sup>, Fernando C. Moraes <sup>4</sup>, Claudia S. Karez <sup>1</sup>, Ricardo G. Bahia <sup>1</sup>, Luís A. Leão <sup>1</sup>, Renato C. Pereira<sup>1,5</sup>, Gilberto M. Amado-Filho <sup>1,†</sup>, Leonardo T. Salgado <sup>1,\*</sup>



**Figure S1.** External morphology and anatomy of identified coralline algae species. *Harveylithon* gr. *rupestris* (A) Specimen with encrusting to warty growth form; (B) Vertical section showing an uniporate tetrasporangial conceptacle flush or slightly raised above the surrounding thallus surface, with tetrasporangia along the conceptacle floor (arrows); *Pneophyllum* gr. *fragile* (C) Specimen with encrusting growth form; (D) Vertical section of a uniporate tetrasporangial conceptacle with a tetrasporangia on the floor and interspersed filaments among the tetrasporangia (arrow); *Melyvonnea erubescens* (E) Specimen with encrusting to warty growth form; (F) Vertical section showing the flattened roof surface (arrow); note a tetrasporangia still connected to the pore canal; *Sporolithon franciscanum* (G) Habit of holotype; (H) SEM view of the upper portion of the thallus showing the paraphyses (white arrowhead) between tetrasporangial chambers, a tetrasporangia subtended by a single stalk cell (arrow) and chambers with a basal layer of elongate cells (black arrowhead).

**Table S1.** Remotely Operated Vehicle (ROV) log sheet at different depths on the South sector of the SEAL shelf. Coordinates are in SIRGAS 2000 Datum.

Line	Latitude (start)	Longitude (start)	Depth (m) start	Latitude (end)	Longitude (end)	Depth (m) end
1	-11,075816	-36,884563	29	-11,095702	-36,857933	46
2	-11,117404	-36,888315	27	-11,129388	-36,872269	44
3	-11,138520	-36,930717	25	-11,160102	-36,902968	40
4	-11,184261	-36,976190	27	-11,205673	-36,947461	42

**Table S2.** Voucher samples of coralline algae deposited in the Herbarium of the Rio de Janeiro Botanical Garden (RB). Coordinates in SIRGAS 2000 Datum.

Family	Genus	Latitude	Longitude	Depth (m)	Voucher
Corallinaceae	<i>Harveylithon rupestris</i>	-111.642	-368.839	47	RB 797663
Corallinaceae	<i>Harveylithon rupestris</i>	-111.642	-368.839	47	RB 797664
Corallinaceae	<i>Harveylithon rupestris</i>	-102.789	-359.792	30	RB 797679
Corallinaceae	<i>Lithophyllum</i> sp.	-104.875	-361.245	30	RB 797660
Corallinaceae	<i>Spongites</i> sp.	-108.223	-366.118	27	RB 797662
Hapalidiaceae	<i>Roseolithon</i> sp.	-102.789	-359.792	30	RB 797666
Hapalidiaceae	<i>Roseolithon</i> sp.	-102.789	-359.792	30	RB 797667
Hapalidiaceae	<i>Roseolithon</i> sp.	-102.789	-359.792	30	RB 797668
Hapalidiaceae	<i>Roseolithon</i> sp.	-102.789	-359.792	30	RB 797671
Hapalidiaceae	<i>Roseolithon</i> sp.	-102.789	-359.792	30	RB 797672

Hapalidiaceae	<i>Roseolithon</i> sp.	-102.789	-359.792	30	RB 797673
Hapalidiaceae	<i>Roseolithon</i> sp.	-102.789	-359.792	30	RB 797674
Hapalidiaceae	<i>Roseolithon</i> sp.	-108.223	-366.118	27	RB 797675
Hapalidiaceae	<i>Roseolithon</i> sp.	-113.389	-370.556	54	RB 797676
Hapalidiaceae	<i>Melyvonnea erubescens</i>	-102.789	-359.792	30	RB 797677
Hapalidiaceae	<i>Melyvonnea erubescens</i>	-102.789	-359.792	30	RB 797678
Mastoporaceae	<i>Pneophyllum fragile</i>	-111.642	-368.839	47	RB 797661
Sporolithaceae	<i>Sporolithon franciscanum</i>	-111.642	-368.839	47	RB 797665



Rhodolith Beds from the Sergipe-Alagoas Basin

**Video S1.** Video obtained from ROV surveys on the middle to outer shelf of the SEAL shelf (South Sector).