# Family Taxa Sex Reproduction

#### Acroporidae

Acropora cervicornis	Н	Broadcast
	(Szmant 1986;	(Szmant 1986;
	Richmond and	Richmond and
	Hunter 1990;	Hunter 1990;
	Soong 1991;	Soong 1991;
	Steiner 1995)	Steiner 1995)

Acropora palmata	Н	Broadcast
	(Szmant 1986;	(Richmond and
	Richmond and	Hunter 1990;
	Hunter 1990;	Soong 1991)
	Soona 1991)	

(Szmant 1986)	Puerto Rico	6 days after August full moon (1984) 7-8 days after July and August full moon (1985)
(Soong 1991)	Panama	August-September (1987- 1988)
(Steiner 1995)	Puerto Rico	6 days after August full moon (1987) Between 21:35-22:15 h
(de Graaf et al. 1999)	Bonaire	5-6 days after August full moon (1996) Between 21:00-22:10 h
(Vargas-Ángel and Thomas 2002)	Florida	2 days after August full moon (2001) Between 23:15-23:30 h
(Vargas-Ángel et al. 2006)	Florida	2-15 days after July and August full moon (2001- 2004) Between 23:00-23:30 h
		Detween 20.00 20.00 II
(Szmant 1986) (Soong 1991)	Puerto Rico Panama	August (1984-1985) August-September (1987- 1988)
(Szmant and Miller 2006)	Florida Keys	5 days prior to August full moon (2003)
(Van Veghel 1993)	Curaçao	During August full moon (1991) Between 21:20-22:15 h
(de Graaf et al. 1999)	Bonaire	4-5 days after August full moon (1996) Between 21:20-22:00 h

Method of observation

Environmental factors linked to spawning

Duration in water column

Field and Laboratory	N/A	N/A
Field	N/A	N/A
Field and Histological	High tide (2001)	N/A

Field and Laboratory	N/A	N/A
Field	N/A	N/A
Field and Laboratory	N/A	Settle 6-8 days after fertilization
Laboratory	N/A	N/A
Field	N/A	N/A

Family	Таха	Sex	Reproduction
Agaricidae	Agaricia agaricites	H (Richmond and Hunter 1990)	Brooding (Duerden 1902; Fadlallah 1983; Richmond and Hunter 1990)

Agaricia tenuifolia		Brooding (original table)
Agaricia lamarcki		Brooding (original table)
Agaricia grahamae		Brooding (original table)
Agaricia fragilis	Unknown (Richmond and Hunter 1990)	Brooding (Richmond and Hunter 1990)
Agaricia undata		Brooding (original table)
Agaricia humilis	H (Richmond and Hunter 1990)	Brooding (Richmond and Hunter 1990; Raimondi and Morse 2000)

Agaricia lamarcki	Brooding (original table)
Helioseris cucullata	Brooding
	(original table)
Leptoseris cucullata	

(Duerden 1902) (Vaughan 1909)	Jamaica Florida Keys & Tortugas	Spring (1902) <i>A. crassa</i> May 9-14, 1908  Full moon on May 16 (1908)
(Vaughan 1910)	Florida Keys & Tortugas	A. crassa Between May 18-24, 1910 Full moon on May 24 (1910)
(Van Moorsel 1983)	Curaçao	Spring and Summer (1979- 1981) No link to lunar cycles All times of day, higher frequency at night
(Carlon and Olson 1993)	Jamaica & British Virgin Islands	N/A

(Van Moorsel 1983)	Curaçao	Year-round Between 18:00-23:00 h
(Raimondi and Morse 2000)	Bonaire	Year-round Peak coincides with <i>A.</i> agaricites spawning No link to lunar cycles All times of day, higher frequency at night

Method of observation

Environmental factors linked to spawning

Duration in water column

Field N/A N/A Swire

Field and Laboratory N/A Swimming larval stage was 2-11+ days after

release

Field and Laboratory N/A Swimming larval stage

was 11-17 days after

release

Laboratory Spawning coincided with

annual period of rising sea water temperatures

24 hours-42 days after release

Field N/A No consistent swimming

pattern

Settlement >24 minutes

after release

Field N/A Larvae are slightly

negatively buoyant Begin downward movement 5 days after

release

Laboratory Peak coincides with 24 hours-42 days

A.agaricites spawning after release

Family	Таха	Sex	Reproduction
Astrocoenidae			
	Stephanocoenia intercepta	G (de Graaf et al. 1999)	Broadcast (de Graaf et al. 1999)

### Source Location Time of spawning

(Hagman et al. 1998a)	Flower Garden Banks	Male: 7-10 days after August full moon (1992- 1993,1997-1998) Between 21:30-00:05 h
(de Graaf et al. 1999)	Bonaire	Female: 7-8, 10 days after August full moon (1993,1997-1998) Between 21:30-00:05 h 3 and 7 days after September full moon
		(1996) Between 20:40-22:45 h

Method of observation

Environmental factors linked to spawning

Duration in water column

N/A

Field Male colonies spawned 30

minutes prior to the onset of

female spawning.

Maximum annual seawater

temperature

Minimum light attenuation

Field N/A N/A

#### Family Taxa Sex Reproduction Source

Caryophyllidae

Eusmilia fastigiata	Brooding (de Graaf et al. 1999)
	1000)

(Steiner 1995)

(de Graaf et al. 1999)

to spawning 7 and 9 days after August Puerto Rico Field N/A full moon (1989) Observations at 21:30 and 21:00 respectively Bonaire 6 days after September Field N/A full moon (1996) 6-9 days after October full moon Between 21:15-22:45 h

**Method of** 

observation

**Environmental** 

factors linked

Time of spawning

Location

## Duration in water column

N/A

Stayed alive for at least 2 weeks without settlement in the lab

Family	Таха	Sex	Reproduction	Source	Location
Faviidae					
	Colpophyllia amaranthus		Broadcast		
	0.1		(original table)		
	Colpophyllia breviserialis		Broadcast (original table)		
	Colpophyllia natans	Н	Broadcast		
	Colpophyllia Hataris	(original table)	(original table)		
		(original table)	(original table)	(Steiner 1995)	Puerto Rico
				(Hagman et al. 1998a)	Flower Garden Banks
				,	
				(Boland 1998)	Flower Garden Banks
	Diploria clivosa	Н	Broadcast		
		(Soong 1991)	(Soong 1991)		
				(Soong 1991)	Panama
				(Van Veghel 1993)	Curaçao
				,	,
	Diploria labyrinthiformis	Н	Broadcast		
		(Duerden 1902;	(Wyers et al.		
		Fadlallah 1983)	1991)		
				(Duerden 1902)	Jamaica
				(Myore et al. 1001)	Bormudo
				(Wyers et al. 1991) (de Graaf et al. 1999)	Bermuda Bonaire
				(de Graai et al. 1999)	Donaire

H (Szmant 1986; Richmond and Hunter 1990; Soong 1991; Steiner 1995)	Broadcast (Szmant 1986; Richmond and Hunter 1990; Soong 1991; Steiner 1995)		
			Bermuda
		(Szmant 1986)	Puerto Rico
		(Soong 1991)	Panama
		(Wyers et al. 1991)	Bermuda
		(Gittings et al. 1992)	Flower Garden Banks
		(Steiner 1995)	Puerto Rico
		(Hagman et al. 1998a)	Flower Garden Banks
		(de Graaf et al. 1999)	Bonaire
H (Duerden 1902; Fadlallah 1983; Szmant 1986; Richmond and Hunter 1990; Soong 1991)	Brooding (Duerden 1902; Fadlallah 1983; Szmant 1986; Richmond and Hunter 1990; Soong 1991)		
,	,	(Duerden 1902)	Jamaica
		(Vaughan 1908)	Florida Keys & Tortugas
		(Vaughan 1910)	Florida Keys & Tortugas
	H (Duerden 1902; Fadlallah 1986; Richmond and Hunter 1995)	(Szmant 1986; Richmond and Hunter 1990; Soong 1991; Steiner 1995)  H (Duerden 1902; Fadlallah 1983; Szmant 1986; Richmond and Hunter 1990; Michael Szmant 1986; Richmond and Hunter 1990; (Szmant 1986; Richmond and Hunter 1990; Richmond and Hunter 1990; (Szmant 1986; Richmond and Hunter 1990; Richmond and Hunter 19	(Szmant 1986; Richmond and Hunter 1990; Soong 1991; Steiner 1995)  Steiner 1995)  Steiner 1995)  (Szmant 1986)  (Szmant 1986)  (Szmant 1986)  (Szmant 1986)  (Szmant 1986)  (Szmant 1986)  (Soong 1991)  (Wyers et al. 1991)  (Gittings et al. 1992)  (Hagman et al. 1998a)  (de Graaf et al. 1999)  H  Brooding (Duerden 1902; Fadlallah 1983; Szmant 1986; Richmond and Hunter 1990; Soong 1991)  Soong 1991)  (Duerden 1902) (Cuerden 1902) (Vaughan 1908)

			(Lewis 1974)	Barbados
			(Szmant-Froelich et al. 1985)	Puerto Rico
			(Szmant 1986)	Puerto Rico
			(32mant 1900)	Fuello Nico
			(Soong 1991)	Panama
			(Soong 1991)	Fanana
			(0.1	
			(Carlon and Olson 1993)	Jamaica & British Virgin Islands
				Totalido
			(Carlon 2002)	Virgin Islands
			,	Ĭ
Manicina areolata	H (Fadlallah 1083)	Brooding (Duerden 1902;		
	(Fadlallah 1983; Richmond and	Fadlallah 1983;		
	Hunter 1990)	Richmond and		
		Hunter 1990)	(Duerden 1902)	Jamaica
			(= 23.20	33

			(Wilson 1888)	Bahamas
			(Johnson 1992b)	Panama
Montastraea annulari	is H	Broadcast		
ivioniastraea annulani	(Szmant 1986; Richmond and Hunter 1990; Soong 1991; Steiner 1995)	(Szmant 1986; Richmond and Hunter 1990; Soong 1991; Steiner 1995)		
			(Szmant 1986)	Puerto Rico
			(Soong 1991)	Panama
			(Szmant 1991)	Puerto Rico
			(Wyers et al. 1991)	Bermuda
			(Gittings et al. 1992)	Flower Garden Banks
			(Van Veghel 1993)	Curaçao

		(Van Veghel 1994)	Curaçao
		(Steiner 1995)	Puerto Rico
		(Knowlton et al. 1997)	Honduras, Panamá
		(Szmant et al. 1997)	Florida Keys & Bahamas
		(Hagman et al. 1998a)	Flower Garden Banks
		(de Graaf et al. 1999)	Bonaire
		(Sánchez et al. 1999)	Colombia
		(Mendes and Woodley 2002)	Jamaica

			(Szmant 2006)	Florida Keys
Montastraea faveolata	H (Steiner 1995)	Broadcast (Steiner 1995)		
			(Szmant 1991)	Puerto Rico
			(Van Veghel 1993)	Curaçao
			(Van Veghel 1994)	Curaçao
			(Steiner 1995)	Puerto Rico
			(Knowlton et al. 1997)	Honduras, Panamá
			(Szmant et al. 1997)	Florida Keys & Bahamas

			(Hagman et al. 1998a)	Flower Garden Banks
			(de Graaf et al. 1999)	Bonaire
			(Sánchez et al. 1999)	Colombia
			(Villinski 2003)	Florida Keys
			(	
			(Beaver et al. 2004)	Mexico
			(Szmant and Meadows 2006)	Florida Keys
			(Szmant and Miller 2006)	Florida Keys
Montastraea franksi	H (Szmant et al. 1997)	Broadcast (Szmant et al. 1997)		
			(Szmant 1991)	Puerto Rico

			(Van Veghel 1993)	Curaçao
			(Van Veghel 1994)	Curaçao
			(Knowlton et al. 1997)	Honduras, Panamá
			(Szmant et al. 1997)	Florida Keys & Bahamas
			(Hagman et al. 1998a)	Flower Garden Banks
			(1.0. (.1.1.1.00)	
			(de Graaf et al. 1999)	Bonaire
Montastraea cavernosa				
	Soong 1991;	(Soong 1991; Steiner 1995)		
	0001ig 1001,	Otomor 1990)		
	Steiner 1995)			
	Steiner 1995)		(Szmant 1986) (Soong 1991)	Puerto Rico Panama
	Montastraea cavernosa	Montastraea cavernosa  G (Szmant 1986;		(Van Veghel 1994)  (Knowlton et al. 1997)  (Szmant et al. 1997)  (Hagman et al. 1998a)  (de Graaf et al. 1999)

			(Szmant 1991)	Puerto Rico
			(Wyers et al. 1991)	Bermuda
			(Gittings et al. 1992)	Flower Garden Banks
			(	
			(1/ 1/ 1/1000)	
			(Van Veghel 1993)	Curaçao
			(Steiner 1995)	Puerto Rico
			(Acosta and Zea 1997)	Colombia
			(Hagman et al. 1998a)	Flower Garden Banks
			(de Graaf et al. 1999)	Bonaire
			(Beaver et al. 2004)	Mexico
			(Doaver et al. 2004)	IVIGATOO
			(Szmant 2006)	Florida Keys
			(Szinan 2000)	1 ionaa reyo
Solenastrea	bournoni	Broadcast		

Solenastrea hyades	Broadcast
	(original table)

Time of spawning	Method of observation	Environmental factors linked to spawning	Duration in water column
7 days after August full moon (1989) Observed at 21:00 h	Field	N/A	N/A
9 and 10 days after August full moon (1994-1995, 1997-1998) Between 20:15-21:40 h	Field	Maximum annual seawater temperature Minimum light attenuation	N/A
9 days after August full moon (1994) Between 20:45-21:05 h 9 days after August full moon (1995) Between 21:15-22:20 h 9 and 10 days after August full moon (1998) Between 20:55-21:27 h	Field	N/A	Gamete bundles reach surface 3-4 minutes after release Bundles break apart after about 30 minutes at the surface
August-September (1987-1988)	Field	N/A	N/A
8 days after September full moon (1991) At 22:45 h	Field	N/A	N/A
N/A	Field	N/A	Swimming planulae settled 2-3 days after release
Late July (1986)	Laboratory	N/A	N/A
7 days after August full moon (1996)	Field	N/A	N/A

September (1982-1984)	Histological	N/A	N/A
7 days after July and	Field and Laboratory	N/A	N/A
August full moon (1985)			
Release at 21:00 hr for 20-			
30 min			
August-September (1987- 1988)	Field	N/A	N/A
7-8 days after August full	Laboratory	N/A	N/A
moon (1986)			
Between 2.24 and 2.44			
hours after sunset	<b>[</b> ]	NI/A	NI/A
7-8 days after August full moon (1991)	Field	N/A	N/A
7 days after July full moon			
Peak after 21:15 h			
Teak aiter 21.1311			
7 days after August full	Field	N/A	N/A
moon (1987)			
Observed at 20:30			
7-10 days after August full	Field	Maximum annual seawater	N/A
moon (1991-1998)		temperature	
Between 20:00-23:00 h		Minimum light attenuation	
7 days after August full	Field	N/A	N/A
moon (1996)			
Peak in April (1902)	Field	N/A	N/A
May 6, 1908	Field and Laboratory	N/A	Swimming larval stage
Full moon on May 16	•		was about 7 days after
(1908)			release
Between May 18-24, 1910	Field and Laboratory	N/A	Swimming larval stage
Full moon on May 24			was 6-23 days after
(1910)			release

May-August around the time of the new moon (?)	Field and Laboratory	N/A	Metamorphosis within 24- 48 hrs. of release Crawling, elongate larvae settle within a few days of release Pear-shaped, swimming larvae remain pelagic longer
Year-round, 12 reproductive cycles (1982- 1984) Sperm released 18 days after new moon Planulae released 6-15 days after new moon with peak on days 8-11	Field and Laboratory	N/A	N/A
Year-round, 12 reproductive cycles (1982- 1984) Sperm released 18 days after new moon Planula released 8-16 days after new moon	Field and Laboratory	N/A	N/A
Year-round (1987-1988) Planulation before the full moon	Field	N/A	N/A
N/A	Field	N/A	Swim upwards for 1-3 minutes after release Most settle to the benthos at ~4 minutes after release
Release beginning 10 days before full moon (1994-1995) Peak on day 4 before full moon	Field	Corals in shallow depths had greater fecundity compared to those in deeper depths	<24 hours after release
N/A	Field	N/A	Larvae settled 2 weeks after release

March 15-21, April 5 (1887)	Laboratory	N/A	Lay motionless for 1-2 days Swim approximately 1 week after release Begin settlement about 1-2 months after release
2 days before new moon June (1990) 3 days before new moon July Between 02:00 and 05:00 h	Histological and Lab	Tidal maxima	6 h after release up to 2 weeks
8 days after September full moon (1984)	Laboratory	N/A	N/A
August-September (1987-1988)	Field	N/A	N/A
1 week following full moon in August and September (1983-1984)	Histological	N/A	N/A
6-8 days following August full moon (1986) Between 2.39 and 2.55 hours after sunset	Laboratory	N/A	N/A
7-8 days after August full moon (1991) 7 days after July full moon Peak after 21:15 h	Field	N/A	N/A
9 days after August full moon (1991) 6-8 days after September full moon 6-7 days after October full moon Between 21:00-23:00 h	Field and Laboratory	N/A	N/A

1 week following full moon in September and October (1990-1993) Between 21:00-23:00 h	Histological & Field	Peak of monthly mean sea surface temperature Intermediate tide	N/A
7 days after August full moon (1989) Between 21:50-23:00 h	Field	N/A	N/A
Peak 7-8 days after August full moon (1994, 1995) Peak 7-8 days after September full moon (1995) Between 21:30-23:00 h	Field and Laboratory	Sunset is a cue for gamete release	N/A
7 days after August full moon; Bahamas (1991) 7-8 days after September full moon; Florida Keys (1993) 7-8 days after August full moon; Florida Keys (1994) 6-8 days after August and September full moons; Florida Keys (1995) Between 21:30-23:30 h for 15-60 minutes	Field and Laboratory	N/A	N/A
8 days after August full moon (1992,1997) Between 23:50-00:15 h	Field	Maximum annual seawater temperature Minimum light attenuation	N/A
5-7 days after September full moon (1996) 6-8 days after October full moon Between 21:35-22:45 h	Field	N/A	N/A
6-7 days after September and October full moon (1997) Between 21:40-21:45 h	Field	N/A	N/A
6-8 days following full moon in August and September (1994-1997) Maximum spawning in September	Field	Prior to month of heaviest rain fall Sea temperatures at maximum	N/A

6 days after August full moon (2004)	Field	N/A	N/A
1 week following full moon in August and September (1983-1984)	Histological	N/A	N/A
9 days after August full moon (1991) 6-8 days after September full moon 6-7 days after October full moon Between 21:00-23:00 h	Field and Laboratory	N/A	N/A
1 week following full moon in September and October (1990-1993) Between 21:00-23:00 h	Histological & Field	Peak of monthly mean sea surface temperature Intermediate tide	N/A
7 days after August full moon (1989) Between 21:50-23:00 h	Field	N/A	N/A
Peak 7-8 days after August full moon (1994, 1995) Peak 7-8 days after September full moon (1995) Between 22:00-23:00 h	Field and Laboratory	N/A	N/A
7 days after August full moon; Bahamas (1991) 7-8 days after September full moon; Florida Keys (1993) 7-8 days after August full moon; Florida Keys (1994) 6-8 days after August and September full moons; Florida Keys (1995) Between 21:30-23:30 h for 15-60 minutes	Field and Laboratory	N/A	N/A

8-9 days after August full moon (1992,1994- 1995,1997-1998) Between 21:40-00:40 h	Field	Maximum annual seawater temperature Minimum light attenuation	N/A
5-7 days after September full moon (1996) 6-8 days after October full moon Between 21:35-22:45 h	Field	N/A	N/A
6-7 days after August- October full moon (1997) Between 20:46-21:20 h	Field	N/A	N/A
After both August full moons (1993) After August full moon (1994)	Laboratory	N/A	N/A
7 days after August full moon (2002) Between 21:30-22:25 h	Field	N/A	N/A
August 18th, 2003 Between 23:30-23:50 h	Laboratory	N/A	Embryos and larvae positively buoyant at surface up to 78 hours after fertilization Planula swimming and neutrally buoyant at 78 hours after fertilization Peak number of larvae settled on the bottom at 127 hours after fertilization
6 days after August full moon (1998 and 2001) 7 days after August full moon (2002)	Field and Laboratory	N/A	Settle 3-5 days after fertilization up to 34 days (1998)
1 week following full moon in August and September (1983-1984)	Histological	N/A	N/A

9 days after August full	Field and Laboratory	N/A	N/A
moon (1991)	riola ana Laboratory	. 47.1	,,
6-8 days after September			
full moon			
6-7 days after October full			
moon			
Between 21:00-23:00 h			
1 week following full moon	Histological & Field	Peak of monthly mean sea	N/A
in September and October	3	surface temperature	
(1990-1993)		Intermediate tide	
Between 21:00-23:00 h			
Peak 7-8 days after	Field and Laboratory	N/A	N/A
August full moon (1994,	,		
1995)			
Peak 7-8 days after			
September full moon			
(1995)			
Between 19:45-21:00 h			
7 days after August full	Field and Laboratory	Began spawning ~1.5 h	N/A
moon; Bahamas (1991)		before M. annularis and M.	
7-8 days after August full		faveolata began release	
moon; Florida Keys (1994)		(1994, 1995)	
6-8 days after August full			
moon; Florida Keys (1995)			
Between 20:30-22:30 for			
30-60 minutes			
			21/2
7-10 days after August full	Field	Maximum annual seawater	N/A
moon (1991-1998)		temperature	
Between 20:40-23:00 h	E-11	Minimum light attenuation	D1/0
5-7 days after September	Field	N/A	N/A
full moon (1996)			
6-8 days after October full			
moon Between 21:35-22:45 h			
Between 21:35-22:45 ft			
			1
Late August (1984-1985)	Field and Laboratory	N/A	N/A
August-September (1987-	Field	N/A	N/A
1988)			

1 week following full moon in July, August, and September (1983-1984)	Histological	N/A	N/A
7-9 days after August full moon (1986) Between 28 minutes and 1.36 hours after sunset	Field and Laboratory	N/A	N/A
7-8 days after August full moon (1991) 7 days after July full moon Peak after 21:15 h	Field	N/A	N/A
8 days after August full moon (1991) 7-8 days after September full moon Between 20:40-23:00 h	Field		N/A
7 days after August full moon (1989) Observation at 20:30 h	Field	N/A	N/A
Following full moon in August, September, and October (1990-1991)	Histological	Increased sea-water temperature Shorter photoperiod	N/A
Male: 7-9 days after August full moon (1990- 1998) Between 20:40-22:00 Female: 7-8 days after August full moon (1991- 1995,1997) Between 21:20-22:15 h	Field	Male colonies spawned 30 minutes up to 3 hours prior to the onset of female spawning.  Maximum annual seawater temperature  Minimum light attenuation	N/A
5-8 days after August full moon (1996) 5-6 days after September full moon 7 days after October full moon Between 19:30-23:05 h	Field	N/A	N/A
8 nights after August full moon (2002) Observation at 22:10 h	Field	N/A	N/A
4-5 days after August full moon (2004)	Field	N/A	N/A

Family	Taxa	Sex	Reproduction
Meandrinidae			
	Dendrogyra cylindricus	G (Szmant 1986; Richmond and Hunter 1990)	Broadcast (Szmant 1986; Richmond and Hunter 1990)
	Dichocoenia stokesi	G/H (Hoke et al. 2002)	Broadcast (Hoke et al. 2002)
	Dichocoenia stellaris		Brooding (original table)
	Meandrina meandrites		Brooding (original table)

### Source Location Time of spawning

(Szmant 1986)	Puerto Rico	Mid August (1984-1985)
(Hoke et al. 2002)	Florida	Two events around full moon in September and October (1999-2000)

# Environmental factors linked to spawning

Field	d and Laboratory		
	Í		
Field	d and Laboratory	N/A	N/A

Family	Таха	Sex	Reproduction
Mussidae	Muses engulare		Duo adia a
	Mussa angulosa		Brooding (original table)
	Mycetophyllia ferox	H (Szmant 1986; Richmond and Hunter 1990)	Brooding (Szmant 1986; Richmond and Hunter 1990)
	Mycetophyllia aliciae		Brooding (original table)
	Mycetophyllia lamarckiana		Brooding (original table)
	Mycetophyllia danaana		Brooding (original table)
	Mycetophyllia reesi		Brooding (original table)
	Isophyllastrea rigida		Brooding (original table)
	Isophyllia sinuosa	G (Duerden 1902; Fadlallah 1983; Richmond and Hunter 1990)	Brooding (Duerden 1902; Fadlallah 1983; Richmond and Hunter 1990)
	Scolymia spp.		Brooding (original table)

Jamaica

(Duerden 1902)

I. dipsacea Spring (1902)

# Environmental factors linked to spawning

Field and Laboratory	N/A	N/A	
Field	N/A	N/A	

Family	Taxa	Sex	Reproduction
Oculinidae			
	Oculina varicosa	G (Brooke and Young 2003)	Broadcast (Brooke and Young 2003)

Oculina spp.	Broadcast (original table)
Oculina diffusa	
Oculina tenella	
Oculina robusta	
Oculina valenciennesi	

## Source Location Method of observation

(Brooke and Young 2003)	Fort Pierce, Florida	Laboratory
(Brooke and Young 2005)	Fort Pierce, Florida	Field

#### Time of spawning

#### **Environmental** factors linked to spawning

#### **Duration** in water column

August and September

N/A

N/A

(2000)

Around 23:30 h

No relationship to lunar or

tidal phases

July, August, and

September (1999)

No relationship to lunar or

tidal phases

Larvae swim at surface

for 18-24 h

Settle between 21-27

days

Can swim up to 42 days

N/A

Family	Таха	Sex	Reproduction
Pocilloporidae	Madracis spp.	Н	Brooding (Vermeij et al. 2003)
	Madracis asperula		
	Madracis carmabi		
	Madracis decactis	H (original table)	Brooding (Vermeij et al. 2003)
	Madracis mirabilis	H (original table)	Brooding (Vermeij et al. 2003)
	Madracis senaria	H (original table)	Brooding (Vermeij et al. 2003)
	Madracis pharensis	H (original table)	Brooding (Vermeij et al. 2003)

Madracis formosa	Н	Brooding
	(original table)	(original table)

(Vermeij et al. 2003)	Curaçao	Temperature cycles dominate over lunar cycles (with exception to <i>M.</i> senaria) March-December release with maximum from September-November
(Vermeij et al. 2003)	Curaçao	Release is independent of lunar cycle March-December release with maximum from September- November
(de Graaf et al. 1999)	Bonaire	2 days after September full moon (1996) In the afternoon hours
(Vermeij et al. 2003)	Curaçao	Release is independent of lunar cycle March-December release with maximum from September-November
(Vermeij et al. 2003)	Curaçao	Release on last quarter moon, lunar days 21 and 26

(Vermeij et al. 2003)

Curaçao

Release is independent of lunar cycle March-December release with maximum from September-November

# Environmental factors linked to spawning

Field	Maximum seawater temperatures occurred one month prior to spawning	16-24 hours after release
Field	Maximum seawater temperatures occurred one month prior to spawning	16-24 hours after release
Field	N/A	N/A
Field Field	N/A  Maximum seawater temperatures occurred one month prior to spawning	N/A 16-24 hours after release
Field	Maximum seawater temperatures occurred one	16-24 hours after release
	Maximum seawater temperatures occurred one	

Field Maximum seawater temperatures occurred one month prior to spawning

16-24 hours after release

Family	Taxa	Sex	Reproduction
Poritidae	Porites astreoides	H/F/M (H: Szmant 1986:	Brooding

(H: Szmant 1986; H/F: Chornesky and Peters 1987; Richmond and Hunter 1990; H/F/M: Soong 1991) (Szmant 1986; Chornesky and Peters 1987; Richmond and Hunter 1990; Soong 1991)

Porites porites	G/H	Brooding
	(G: Duerden 1902	(Duerden 1902;
	G/H: Tomascik	Goreau et al.
	and Sander 1987;	1981; Richmond
	Richmond and	and Hunter 1990)
	Hunter 1990)	

Porites furcata	G	Brooding
	(Soong 1991)	(Soong 1991)

Porites divaricata	Brooding (original table)
Porites branneri	Brooding (original table)
Porites colonensis	Brooding (original table)

(Vaughan 1908)	Florida Keys & Tortugas	May 3,1908 Full moon on May 16 (1908)
(Vaughan 1909)	Florida Keys & Tortugas	May 13-14 1908 Full moon on May 16 (1908)
(Vaughan 1910)	Florida Keys & Tortugas	Between May 18-24, 1910 Full moon on May 24 (1910)
(Szmant 1986) (Chornesky and Peters 1987)	Puerto Rico Jamaica	N/A Maximum in April (1981- 1982) Male gametes spawned prior to the new moon Larvae released at the new moon
(Soong 1991)	Panama	Year-round (1987-1988) No planulae observed in January Between the 13th and 25th lunar days
(McGuire 1998)	Florida Keys	10 days prior to new moon through 11 days after new moon from April-June (1993-1996), July (1994), August (1993), September (1993) Maximum release in April and May Release at night
(Edmunds et al. 2001)	Florida Keys	1-4 days after June new moon (1999)

(Duerden 1902)	Jamaica	P. clavaria
(Vaughan 1908)	Florida Keys & Tortugas	P. clavaria May 7-10 1908 Full moon on May 16 (1908)
(Vaughan 1910)	Florida Keys & Tortugas	P. clavaria Between May 18-24, 1910 Full moon on May 24 (1910)
(Goreau et al. 1981)	Jamaica	November 10-24 (1977) No correlation to lunar phases
(Tomascik and Sander 1987)	Barbados	Peak November-January (1982-1983)
(Soong 1991)	Panama	Year-round (1987-1988) No planulae observed in February and March Peak around the new moon

**Environmental** factors linked to spawning

**Duration** in water column

N/A Field and Laboratory

ranged from 5 to 12 days after release

Field and Laboratory N/A Swimming larval stage ranged from 2-7+ days

Swimming larval stage

after release

Field and Laboratory N/A Swimming larval stage

was 7-22 days after

release

Field and Laboratory Histological

N/A N/A

N/A N/A

Field N/A N/A

Laboratory

Maximum spawning at mean temperatures between 24.5 and 28.0 °C Reproductive season decreases with increasing latitude

N/A

Field

N/A

N/A

Field	N/A	Planulae settled within 2-3 days of release
Field and Laboratory	N/A	Swimming larval stage was about 4-13+ days after release
Field and Laboratory	N/A	Swimming larval stage was 12-20 days after release
Laboratory	N/A	Settlement within a week of release.
Histological	Less larvae on polluted than non-polluted reefs	N/A
Field	N/A	N/A

Family	Taxa	Sex	Reproduction
Siderastreidae	Siderastrea siderea	G (Szmant 1986; Richmond and Hunter 1990; Soong 1991)	Broadcast (Szmant 1986; Richmond and Hunter 1990; Soong 1991)

Siderastrea radians	H/G	Brooding
	H: (Duerden 1902)	(Duerden 1902,
	G: (Szmant 1986;	1904; Fadlallah
	Soong 1991)	1983; Richmond
		and Hunter 1990;
		Soong 1991)

### Source Location Time of spawning

(Szmant 1986)	Puerto Rico	July-September (1984-1985)
(Soong 1991)	Panama	August-September (1987- 1988)
(Duerden 1904)	Jamaica	End of June through July (1904)
(Szmant 1986)	Puerto Rico	Questionable year-round brooding season Spawning season unknown
(Soong 1991)	Panama	Year-round (1987-1988) Peak during period between new moon and full moon

# Environmental factors linked to spawning

Field and Laboratory	N/A	N/A
Field	N/A	N/A
Field	N/A	Larvae settled 1-2 days after release
Field and Laboratory	N/A	N/A
Field	N/A	N/A