<i>Botryllus</i>								Botrylloides					
B. primigenus	B. horridus	B. scalaris	B. puniceus	B. sexiens	B. delicatus	B. schlosseri	B. promiscuus	B. simodensis	B. praelongus*	B. lentus	B. fuscus	B. lenis	B. violaceus
													flat
	-												2.0 - 3.0
orval	orval	ladder	ladder	ladder	ladder	orval	ladder	ladder	ladder	ladder	ladder	ladder	ladder
gelatinous, soft,	translucent,	transparent, gelatinous, soft,	transparent, gelatinous, soft,	transparent, gelatinous,	transparent, gelatinous,	transparent, gelatinous, soft,	transparent, gelatinous, soft,	transparent, gelatinous, soft,	1 ,	· · · · ·	translucent, gelatinous, soft	tranparent, gelatinous, very	transparent, gelatinous, s
	gelatinous			extremely soft	extremely soft							soft	
1015	2 5-3 0	15	98-38	25-20	2 5-3 0	20-28	15-20	20-25	15-30	21-25	9 9-9 7	20-23	2.5 - 3.0
110 110		L4, S4			L4, S4								L4, S4, M2-
4	R9-11, L8-11	8	8-11	9-10	9-10	8	12-13	11	10-11	18	9	R9, L8	10-11
complete	complete	incomplete	incomplete	incomplete	incomplete	incomplete	incomplete	incomplete	incomplete	incomplete	incomplete	incomplete	incomplete
3	3	3	3	3	3	3	3	3	3	3	3	3	3
9-10	9	8-9	9-10	11	8-9	8	8-9	9	8-9	9	8	8	9
large	large	large	large	large	large	large	large	small	small	small	small	small	small
													all seasons R2, L2
	infrequently 10 days	infrequently 5-6 days	sometimes one week	infrequently 5-6 days	sometimes one week	infrequently one week	infrequently one week	infrequently 5-6 days	1 0	infrequently 7-9 days	infrequently 7-9 days	sometimes 6-7 days	infrequently 5-6 days
		Jun-Nov	Apr-Jun	Jul-Dec	Jul-Dec		Jul-Dec		· .	0	Jul-Sep	Jul-Oct	May-Aug
	anterior to the testis	anterior to the testis	anterior to the testis	anterior to the testis	anterior to the testis	anterior to the testis	anterior to the testis	posterior to the testis	-	-	posterior to the testis	posterior to the testis	posterior to testis
hemisphere, white	rosette, grayish	rosette, grayish	rosette, milky- white	rosette, grayish	rosette, grayish	rosette, white	rosette, grayish	rosette, grayish	rosette, grayish	rosette, grayish	rosette, grayish	rosette, grayish	rosette, gra
yellow	yellowish	orange	orange	yellow	yellow	yellowish	orange	yellowish orange			orange	pinkish or	yellow
ovoviviparous	ovoviviparous	ovoviviparous	ovoviviparous	ovoviviparous	ovoviviparous	ovoviviparous	ovoviviparous	ovoviviparous	ovoviviparous	viviparous	viviparous	viviparous	viviparous
170-180	250-260			150	250		230-250	250	200-250	300-330	160-200	90-100	<100
R1, L1	R1-2, L1-2	R1-2, L1-2		,	,								R1, L1
·	no brooding organ	no brooding organ	no prooding	formed from	formed from	formed from	•	pouch formed from atrial wall	•		-	pouch formed from atrial wall	pouch form from atrial
-	350	-	-	-	-	280-300	-	300	-	1000-1100	800-1000	750-800	1000-1200
in one week	in 8 days	in 4-5 days	in one week	in 4-5 days	in one week	in one week	in one week	in 4-5 days	in 4-5 days	in 10-12 days	in 12-14 days	in 20 days	more than month
degeneration of	degeneration of		degeneration of	degeneration of		5	shortly before degeneration of	shortly before degeneration of	shortly before degeneration of parent zooids	shortly before degeneration of			after 6-7 tin of takeover blastozooid
parent zooids	parent 2001us	parent zoolus	parent zooras	parent zoolas	parent zoonas	parent zooras	parent zoolus	parent 2001as	parent zoorus	parent zoolas	parent zoonas	parent zoolas	51451020014
15	1.7-1.8	1.5	1.5	1.5-1.8	1.5	1.6	1.5-1.8	1.7-2.0	1.5-1.8	$2.5 \cdot 2.7$	2.6 - 2.7	2.2-2.4	3
		400			400	400	400	500			900	700	1000
8	8	8	8	6	8	8	8	8	8	8	8	14-24	24-34
-	-	~	-	-	-	~	-	-	-	-	-		
-	520	-	500	-	750	500	900	900	700	1000	1000	850-900	1100-1200
		-	L4	-	L4. S4	-	L4. S4				-	-	-
		-	4	-		L4, R4-5		-		6-7	7	8	-
-		-	4-5	-	5	5	5	-	* 5	-	-	-	-
R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1, L1	R1, L1	R1	R2, L1
present	absent	present	present	present	present	present	present	present	present	present	present	-	present
after tunic fusion and before	-	after vascular	after vascular	after vascular	after vascular	before tunic	before tunic	before tunic			before tunic	-	before tuni
vascular fusion													fusion
occurs soon at the contact area	-									•	rejection does not occur	-	rejection d not occur
present Tokioka, 1953;	- Saito &	present Saito et al.,	present Saito &	present Saito et al.,	present Okuyama &	present	present Okuyama &	present	* present	present Saito &	present Saito &	- Saito &	present Saito et al.
	 B. primigenus B. primigenus B. primigenus Flat 1.0-1.5 ransparent, gelatinous, soft, gelatinous, soft, 1.0-1.5 L4, S4-8 4 complete 3 9-10 arge all season R1-2, L1-2 usually 4-5 days Apr-Nov anterior to the testis hemisphere, white yellow ovoviviparous 170-180 R1, L1 pouch formed from atrial wall - in one week about 4 days after degeneration of parent zooids 1.5 400 8 - R1 present after tunic fusion and before vascular fusion accurs soon at the 	B. primigenusB. horridusflatrugged1.0-1.52.5-3.5orvalorvaltransparent, gelatinous, soft,a little translucent, gelatinous1.0-1.52.5-3.0L4, S4*8L4, S4, M84R9-11, L8-11 complete339-109largelargeall seasonall seasonsR1-2, L1-2R1-2, L1-2usuallyinfrequently to days4-5 daysjul Sep anterior to the anterior to the testisNemisphere, whiteyellowish ovoviviparous to voviviparous to zo-260 R1, L1pouch formed from atrial wallno brooding organ1.51.7-1.8400400-43088-1.51.44004.088-2.51.4-2.51.4-2.51.4-3.501.4-3.501.4-3.501.4-3.501.5-3.501.7-4.51.4-5.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4-7.51.4 <tr< td=""><td>B. primigenusB. horridusB. scalarisflatruggedflat1.0-1.52.5-3.51.0-1.5orvalalittletransparent, gelatinous, soft, alittletransparent, gelatinous1.0-1.52.5-3.01.5L4, S4-8L4, S4, M8L4, S44R9-11, L8-118completecompleteincomplete339-1098-9alregelargelargelargeall seasonall seasonsall seasonsall seasonsR1-2, L1-2R1-2, L1-2R1, L1usuallyinfrequently infrequentlyinfrequently infrequently4.5 daysjul Sep anterior to the testisJun Nov anterior to the testispouch formed from attrial wallrosette, grayish ovoviviparous organorange ovoviviparous organ1.51.7-1.8R1-2, L1-2pouch formed from attrial wallno brooding organorange ovoviviparous organ1.51.7-1.81.5-12in one weekin 8 daysin 4-5 days1.51.7-1.81.5400400-430400-4308520-1.51.7-1.81.54005-1.51.7-1.81.54001.7-1.81.54101.7-1.81.54114125-4135-414415<</td><td>B. primigenusB. horridusB. scalarisB. puniceusflatruggedflatflatflatflat1.0-1.52.5-3.51.0-1.50.8-2.2orvalaldderladderladdertransparent, gelatinous, soft, relatinousalittletransparent, gelatinous, soft, relatinoustransparent, gelatinous, soft, relatinousrensparent, gelatinous, soft, delatinous, soft,1.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.53.5331.0-1.52.5-3.01.52.8-3.81.1R.9-11, LS-1188-11completeomopleteincomplete33339-1098-99-10largelargelargeall seasonall seasonsall seasonsR1-2, L1-2R1-2, L1-2R1-2, L1usuallyinfrequentlyinfrequently4.5 daysjul-SepJun-Novanterior to the testistestishemisphere, whiterosette, grayishrosette, grayishyellowyellowish oroviniparousoroviniparousovoviniparousovoviniparousovoviniparousovoviniparoussoft parent zoidsin obroodin</td><td>R. primigenusR. horridusB. scalarisR. puniceusR. sexiensflatruggedflatflatflatflatflat1.0-1.52.5'3.51.0-1.50.8'-2.22.5'3.0transparent, gelatinous, soft,alittle transparent, relatinous, soft,transparent, gelatinous, soft,transparent, gelatinous, soft,transparent, relatinous, settletransparent, transparent, gelatinous, soft,transparent, relatinous, soft,transparent, relatinous, settletransparent, transparent, transparent, transparent, transparent, transparent, transparent, transparent, relatinous, soft,1.6'2.5'3.01.5'1.0-1.52.5'3.01.52.8'3.82.5'3.01.6'1.0-1.52.5'3.01.5'2.8'3.82.5'3.01.6'1.4, S4'8L4, S4, M8L4, S4L4, S4L6, S61.6'4R9'11, L8'1188'''1.6'''1.1'''''''''''''''''''''''''''''''''''</td><td>R. primigenusB. horridusB. soalarisB. puniceusB. sexiensB. delicatusflatruggedflatflatflatflatflatflatflat10-1.52.5-3.51.0-1.50.8-22.5-3.02.5-4.0orvala littletransparent, gelatinous, soft, runalucent, gelatinous, soft,ladderladderladder10-1.52.5-3.01.52.8-3.82.5-3.02.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.8-3.81.6.84.1.54.54.51.0-1.52.8-3.81.6.81.18.91.0-1.51.52.8-3.83.3333.0333333.0333331.0-11.18.91.18.9largelargelargelargelargeall seasonall seasonsall seasonsall seasonsall seasons1.2-1.1R1.2, L1-2R1, L1R1, L1R1, L1usuallyinferquentlyinferquentlysometimesonterior to the anterior to the anterior to</td><td>R primigenusR. horridusR. socharisR. delicatusR. delicatusR. schlasserflatruggedflat</td><td>R. primigensB. cheradusB. scalarisR. puniceusR. scelarisR. delicatusR. schlosserR. promiseuusflat</td><td>B. primingumsB. berlatisB. seutorsB. seutors<</td><td>R PrimacyB. barrierB. barrierB. achiarsB. achiars<!--</td--><td>R primate R primate R primate R primate R primate R primate R primate R primate R primate<br <="" td=""/><td>R, pointingR, bornersoR, bornersoR, pointingR, pointi</td><td>R. minor R. markor R. ma</td></br></br></br></br></br></br></td></td></tr<>	B. primigenusB. horridusB. scalarisflatruggedflat1.0-1.52.5-3.51.0-1.5orvalalittletransparent, gelatinous, soft, alittletransparent, gelatinous1.0-1.52.5-3.01.5L4, S4-8L4, S4, M8L4, S44R9-11, L8-118completecompleteincomplete339-1098-9alregelargelargelargeall seasonall seasonsall seasonsall seasonsR1-2, L1-2R1-2, L1-2R1, L1usuallyinfrequently infrequentlyinfrequently infrequently4.5 daysjul Sep anterior to the testisJun Nov anterior to the testispouch formed from attrial wallrosette, grayish ovoviviparous organorange ovoviviparous organ1.51.7-1.8R1-2, L1-2pouch formed from attrial wallno brooding organorange ovoviviparous organ1.51.7-1.81.5-12in one weekin 8 daysin 4-5 days1.51.7-1.81.5400400-430400-4308520-1.51.7-1.81.54005-1.51.7-1.81.54001.7-1.81.54101.7-1.81.54114125-4135-414415<	B. primigenusB. horridusB. scalarisB. puniceusflatruggedflatflatflatflat1.0-1.52.5-3.51.0-1.50.8-2.2orvalaldderladderladdertransparent, gelatinous, soft, relatinousalittletransparent, gelatinous, soft, relatinoustransparent, gelatinous, soft, relatinousrensparent, gelatinous, soft, delatinous, soft,1.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.52.5-3.01.52.8-3.81.0-1.53.5331.0-1.52.5-3.01.52.8-3.81.1R.9-11, LS-1188-11completeomopleteincomplete33339-1098-99-10largelargelargeall seasonall seasonsall seasonsR1-2, L1-2R1-2, L1-2R1-2, L1usuallyinfrequentlyinfrequently4.5 daysjul-SepJun-Novanterior to the testistestishemisphere, whiterosette, grayishrosette, grayishyellowyellowish oroviniparousoroviniparousovoviniparousovoviniparousovoviniparousovoviniparoussoft parent zoidsin obroodin	R. primigenusR. horridusB. scalarisR. puniceusR. sexiensflatruggedflatflatflatflatflat1.0-1.52.5'3.51.0-1.50.8'-2.22.5'3.0transparent, gelatinous, soft,alittle transparent, relatinous, soft,transparent, gelatinous, soft,transparent, gelatinous, soft,transparent, relatinous, settletransparent, transparent, gelatinous, soft,transparent, relatinous, soft,transparent, relatinous, settletransparent, transparent, transparent, transparent, transparent, transparent, transparent, transparent, relatinous, soft,1.6'2.5'3.01.5'1.0-1.52.5'3.01.52.8'3.82.5'3.01.6'1.0-1.52.5'3.01.5'2.8'3.82.5'3.01.6'1.4, S4'8L4, S4, M8L4, S4L4, S4L6, S61.6'4R9'11, L8'1188'''1.6'''1.1'''''''''''''''''''''''''''''''''''	R. primigenusB. horridusB. soalarisB. puniceusB. sexiensB. delicatusflatruggedflatflatflatflatflatflatflat10-1.52.5-3.51.0-1.50.8-22.5-3.02.5-4.0orvala littletransparent, gelatinous, soft, runalucent, gelatinous, soft,ladderladderladder10-1.52.5-3.01.52.8-3.82.5-3.02.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.5-3.01.52.8-3.82.5-3.02.5-3.01.0-1.52.8-3.81.6.84.1.54.54.51.0-1.52.8-3.81.6.81.18.91.0-1.51.52.8-3.83.3333.0333333.0333331.0-11.18.91.18.9largelargelargelargelargeall seasonall seasonsall seasonsall seasonsall seasons1.2-1.1R1.2, L1-2R1, L1R1, L1R1, L1usuallyinferquentlyinferquentlysometimesonterior to the anterior to the anterior to	R primigenusR. horridusR. socharisR. delicatusR. delicatusR. schlasserflatruggedflat	R. primigensB. cheradusB. scalarisR. puniceusR. scelarisR. delicatusR. schlosserR. promiseuusflat	B. primingumsB. berlatisB. seutorsB. seutors<	R PrimacyB. barrierB. barrierB. achiarsB. achiars </td <td>R primate R primate R primate R primate R primate R primate R primate R primate R primate<br <="" td=""/><td>R, pointingR, bornersoR, bornersoR, pointingR, pointi</td><td>R. minor R. markor R. ma</td></br></br></br></br></br></br></td>	R primate R primate 	R, pointingR, bornersoR, bornersoR, pointingR, pointi	R. minor R. markor R. ma