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**TABULARIA TABULATA (C. AGARDH)
SNOEIJS (BACILLARIOPHYTA)**

Tabularia tabulata (C.A. Agardh) Snoeijs (*Bacillariophyta*)

tabulata.

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(Pritchard, 1861; Karsten, 1899; Geitler, 1973; Drebes, 1977; Round et al., 1990; Chepurinov et al., 2004; • • • • •, 2009).

(Mann, Droop, 1996; Mann, 1999).

Fragilariaceae Grev. 23

(Round et al., 1990),

Fragilaria, *Diatoma*, *Synedra*, *Tabularia* –

Asterionella,

Synedra *Tabularia*;

Synedra *Tabularia* (Williams,

Round, 1986)

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Tabularia affinis (Kütz.) Snoeijs, *T. fasciculata* (C. Agardh)
D.M. Williams and Round, *T. tabulata* (C.A. Agardh) Snoeijs
(Snoeijs, 1992). *T. affinis* (*Synedra affinis*)
(Karsten, 1899).

T. fasciculata (Kaczmarska et
al., 2009; Davidovich et al., 2010). (1987, 1989, 1994)
Synedra tabulata, *Tabularia tabulata*.
T. tabulata

Tabularia,

(Medlin et al., 1993; Medlin et al., 1996; Mann, Evans, 2007; Medlin, 2009).
(Alverson, Theriot, 2005),

(Medlin et al., 1993; Medlin, Kaczmarska,
2004; Medlin, 2009),

(
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(Mann ,
1993).

(Sato, Medlin, 2006),

T. tabulata

(, 1994; Chepurinov, Mann, 1997;
, 2002),

T. tabulata.

Tabularia tabulata

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(45° 21' 12" N, 36° 28' 40" E)
 20 . *Tabularia affinis* *T. fasciculata*
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 (44°54' 40" N, 35° 12' 05" E).
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 4-5 , , ,
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 (Berges et al., 2001),
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 Jeol JSM-6390 LA (Japan)
 JEOL JSM-5600 (JEOL USA, Peabody, MA, USA).
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Tabularia tabulata

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T. affinis (. II,).
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	1)	2)	3)	1)	2)	4)
,	16-163 (n = 218)	22-176	10-248 (n = 1480)	7 - 403 (n = 2334)	100-540	14-258 (n = 1290)
,	-	4,5-8	3,8-9,0 (n = 164)	8,1 - 12,6 (n = 60)	6-9	-
10 ()	9,4-13,4 (n = 5)	9-13	10,8-15,6 (n = 164)	12,7 - 14,9 (n=20)	9-13	-
-	26-43 (n = 137)	-	29-113 (n = 228)	8 - 149 (n=140)	-	14-108 (n = 550)
,	122-163 (n = 61)	-	98-248 (n = 422)	130-403 (n = 471)	-	116-258 (n = 370)

1) 2) (Snoeijs, 1992). 3) -
 (Cape Tormentine), (Gulf of St. Lawrence), 4)
 (1987, 1989, 1994). n -

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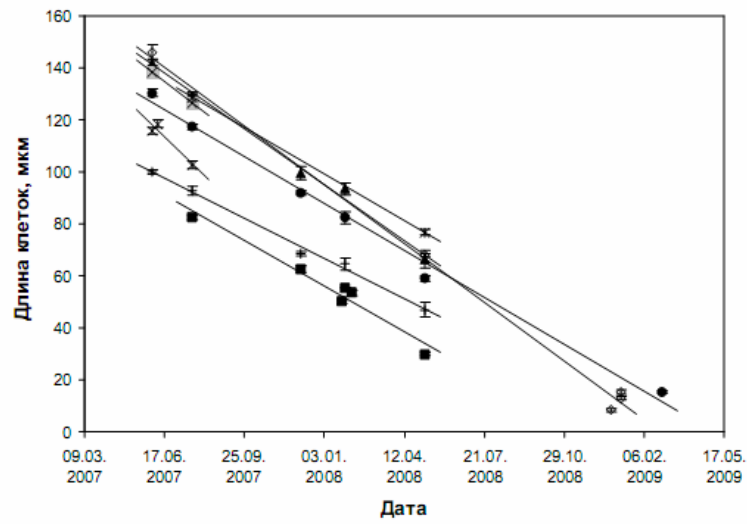
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T. tabulata T. fasci-

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Tabularia tabulata (C.A. Agardh) Snoeijs

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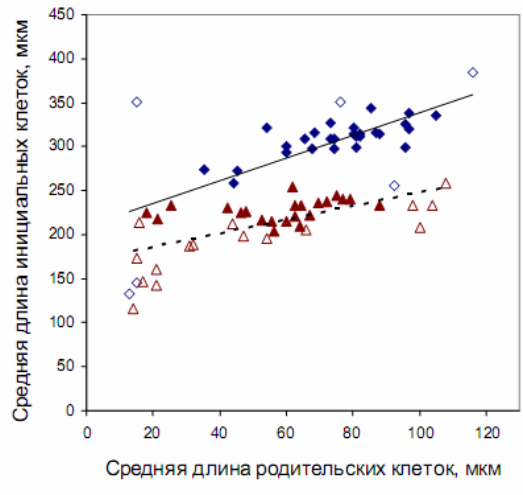
T. tabulata

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2. *Tabularia tabulata* () , *T."tabulata"* (, 1994). ()

2. *Tabularia tabulata*,

			0421-B	0421-D	0421-I	0421-J	0504-E	0504-G	0504-I	0506-A
			M	F	M	M	M	F	M	M
0421-B	+	M	1							
0421-D	-	F		0						
0421-I	-	M		3	0					
0421-J	+	M	0	3	0	1				
0504-E	+	M					1			
0504-G	+	F	3	0	3	3	3	1		
0504-I	+	M	0			0		3	1	
0506-A	+	M	1	3		0		3	0	1

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Tabularia tabulata

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(0421-I) intra 1125-C	+	M
(0421-J) intra 1126-C	+	M
(0421-J) intra 1206-B		M
(0421-J) intra 1226-B	+	M
(0504-G) intra 0313-A		F
(0504-G) intra 0313-E		F
(0504-G) intra 0313-I		F
(0504-G) intra 0313-K		F
(0504-G) intra 0812-G		F
(0504-I) intra 1113-A		F
(0506-A) intra 0704-A		M
(0506-A) intra 1120-A		F
(A.D) 0206-A		F
(A.D) 0206-B		F
(A.D) 0206-C		M
(A.D) 1217-B		F
(A.D) 1218-C		F
(G.I) 0204-A		F
(G.I) 0204-B		M
(G.I) 0204-C		F
(G.I) 1217-B		M
(G.I) 1218-A		F
(G.I) 1218-E		F

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C . .) (A.D) – 0506-A 0421-D, (G.I) – 0504-G 0421-I;

(Behnke et al., 2004; Amato et al., 2007; Evans et al., 2007).

(Amato et al., 2007). (Godhe et al., 2006),

(Cerino et al., 2005)

(Kaczmarska et al., 2009)

(, 1974),

. . (Chepurnov et al., 2004).

Tabularia tabulata

T. tabulata

(. II,),

T. fasciculata (. II,),

T. affinis (. II,).

(Snoeijs, 1992).

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(Kaczmarska et al., 2009).

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258 *T. 'tabulata'* . . .

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T. fasciculata:
 al., in press)
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 $y = 1,55x + 63$ (2)
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T. tabulata *T. fasciculata*
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 (1994),
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 (Geitler, 1973) (Mann, 1993).
 (Geitler, 1973)
T. tabulata
 IA2,
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 1982).

Achnanthes, *Mastogloia*, *Pseudonitzschia*,
, *Fragilaria*, *Licmophora*, *Striatella*, *Synedra*
(Chepurnov, Mann, 2004; Chepurnov et al., 2004).

– *Nitzschia longissima* (Bréb.) Ralfs (Karsten, 1899; , 1994;
, 2002, 2005).

T. tabulata
Fragilaria delicatissima

N. longissima *T. "tabulata"*,

1994; , 2002, 2005).

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et al., 2006). *T. tabulata* (Davidovich

$0,5^5 = 0,03$,

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Nitzschia longissima (, 2005; Davidovich et al., 2006).
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Tabularia tabulata.

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(J.M. Ehrman, Digital Microscopy Facility, Mount Allison University,
Canada).

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24, Nauka St., Settl. Kurortnoye, 98188 Feodosiya, Ukraine

SEXUAL REPRODUCTION AND MATING SYSTEM OF THE *TABULARIA*
TABULATA (C. AGARDH) SNOEIJIS (*BACILLARIOPHYTA*)

Sexual reproduction and mating system of the diatom *Tabularia tabulata* were studied
in clonal cultures. *Cis*-type anisogamous sexual reproduction was revealed. Mating system

involves homo- and heterothallic modes of reproduction; and both male and female clones are capable to reproduce homothallically. The combination of homo- and heterothallic modes of reproduction gives certain evolutionary advantage; on the one hand, providing homozygous lines, and on the other hand, increasing genetic diversity. Study of sex inheritance in the first generation progeny revealed the nature of sex determination in *T. tabulata*. Male sex is heterogametic resulting from the presence of two alternative genetic factors, conditionally M and F, while female is homogametic and determined by combination of FF sexual factors.

Key words: *Tabularia tabulata*, sex inheritance, sexual reproduction, mating system.

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(*Bacillariophyta*) // ... – 2002. – **12**, 3. – C. 279-289.
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- ... *Nitzschia longissima* (Bréb.) Ralfs (*Bacillariophyta*) // ... –
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- ... *Bacillariophyta* // ... –
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- ... ESAW
// ... – 2009:
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... : - , 2009. – . 538-544.
- ... p ... : , 1984. –
424 .
- ... , ... : , 1974. – 460 .
- ... : . , 1973. – 320 .
- ... // .
... – 1987. – **48**, 6. – C. 771-783.
- ... *Synedra tabulata* // ... –
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