

582.286

1, 2
 1 - , 01001 , 2,
 2
 65026 , 2,

CHARALES

Charales

16 *Chara* L. (13),
Lamprothamnium J. Groves (1), *Nitella* C. Agardh (1) *Nitellopsis* Hy (1).
 10 (*Chara connivens* Salzm. ex A. Braun,
Ch. uzbekistanica Hollerb., *Nitella mucronata* (A. Braun) Miq. in H.C. Hall). *Ch. braunii*
 C.C. Gmelin, *Ch. contraria* A. Braun ex K tz., *Ch. fragilis* Desv. in Loisel., *Ch. horrida* Wahlst., *Ch.*
tenuispina A. Braun *Ch. schaffneri* (A. Braun) Allen
Ch. aculeolata K tz. in Rchb., *Lamprothamnium papulosum* (Wallr.)
 J. Groves, *Nitellopsis obtusa* (Desv. in Loisel.) J. Groves, *Ch. canescens* Desv. et Loisel. in Loisel.,
 (1996). *Charales*

Charales

(*Charales*)

1920-
 (, 1936) 1940-60- (, 1953, 1955;
 , 1973),
Charales

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12 Charales, 10
Chara L., *Lamprothamnium papulosum* (Wallr.) J. Groves *Nitellopsis obtusa*
 (Desv. in Loisel.) J. Groves. (
) *Chara fragilis* *Ch.*
vulgaris. *Ch. contraria.* *N. obtusa*
 (). *Ch. braunii* (), *Ch.*
horrida () *Ch. tenuispina* (). -
Ch.
aculeolata, *Ch. aspera*, *Ch. canescens*, *Ch. hispida* *L. papulosum.*
 Charales ,

1989-2007 ., 28 .
 :
 (, , ,);
 (,); ; ;
 (, , ,) (,)
 , - ,)
 , -
 (, -
 , 1991).

Charales - ,
 1920-2007 ., ,
 , ,

Chara L.

Ch. aculeolata Kütz. in Rchb. 1832. Fl. Germ. Excurs. 2: 843.

. . . , " - , . . .
 leg. . . ; , . . . () , 22.08.1989,
 . . . ; , . . . () , 24.08.1989, leg.
 10.08.1990, leg.
 :
 .. (- , 2004 ; ,
 , 2007). : , .. (,
 , ,) (,)
 (.., 1973, - , 1998;
 , 1999; , 2002).
 . () ,
 (, , , ,) .

Ch. aspera Dethard. ex Willd. 1809. Ges. Naturf. Freunde Berlin Mag. 3: 298.

. . . , " - , . . .
 . . . ; , . . . , 10.08.1990, leg.
 . . . ; , . . . , 0,7 () ,
 28.07.1998, leg.
 :
 .. (- , 2004 ; ,
 , 2007). : , .. (-
 ,) (,)
 (, 1936; , 1955; .., 1973; , 2003).
 . (, , -
 , , ,) , . (,
) .

2,5), ,

Ch. braunii C.C. Gmelin 1826. Fl. Bad. 4: 646.

= *Ch. coronata* Ziz et Bisch.

. . . " - , . . .
 ; . . . (-
 , 1980), .. - (, 1936).

...
: , ; :
(, - , 1991).

Ch. canescens Desv. et Loisel. in Loisel. 1810. Not. Fl. France: 139.
= *Ch. crinita* Wallr.

...
0,7 (), 10.08.1989, leg.
...
(-
, 1998; , 2002),
,
(, 1936; , 1953, 1955;
, -
, 1991; , 2005).

Ch. connivens Salzm. ex A. Braun 1835. Flora 18: 73.

...
(), 25.07.
2006, leg.

...
(, 1991).
(,)
(30-
60) (20-25). (786×440)
(720×400) (, - , 1991),
(- 1200 ,
- 600-1100).

Ch. contraria A. Braun ex Kütz. 1845. Phycol. Germ.: 258.

...
(, 1936; , 1955).
(, 1936);
(- , 1980).
30-50
(, 1953).

...
(- , 2004 ; , 2007),
, (- , 2006).
(- , 2006),

(, - , 1991). : (- - , 1998), , . (, 1936; , 1955).

Ch. fragilis Desv. in Loisel. 1810. Not. Fl. France: 137.

, , 50 ; . (, 1936).

Ch. hispida L. 1753. Sp. Pl.: 1156.

, 100 , 1 , , 26.08.2002, *leg.* . . . : (- , 2004). : , , . (, 1936).

(, ,), . () ,

Ch. aculeolata.

(, - , 1991) *Ch. aculeolata* , *Ch. hispida* .

Ch. horrida Wahlst. 1862. Bidr. Kännnd. Skand. Art.: 24.

, (, 1936).

, : (, , , ,).

Ch. schaffneri (A. Braun) Allen 1888. Char. Am. 1: 68.

, () , 10.08.1966, *leg.* . . . (, , 1991).

: (- , 2004). : (- , 1998), . (, - , 1991).

() , . .

Ch. tenuispina A. Braun 1835. Flora 18: 68.

(, 1936).

(.). : . (, 1936).

(,),

Ch. vulgaris L. 1753. Sp. Pl.: 1156.

= *Ch. foetida* A. Braun

„ - ,

, 25.06.2001;

, 14.04.2007, *leg.* . . .

„ - , , 24.11.2006, *leg.*

. . . ; - , . . . ,

, 04.11.2006, *leg.* . . . ; . . . ,

16.04.2007, *leg.* . . .

. K .

Ch. uzbekistanica Hollerb. 1960. Bot. mater. Otd. spor. rast. Bot. Inst. AN SSSR 13: 102-105.

„ - , . . .

2 (), 28.08.2002, *leg.* . . .

„ - , . . .

„ - , . . .

(,), (,

).

Lamprothamnium J. Groves

L. papulosum (Wallr.) J. Groves 1916. J. Bot., London 54: 337.

= *L. alopecuroides* (Delile ex A. Braun) A. Braun

„ -

0,5-1,5

(), 1990, *leg.* . . .

„ -

, 1998); „ (, 1936;

., 1973).

(, ,

), , .

Nitella C. Agardh

N. mucronata (A. Braun) Miq. in H.C. Hall 1841. Fl. Belg. Sept. 2: 428.

„ - , . . .

, , 22.11.2006, *leg.* . . . ;

(, 2005).



Charales - ; -

Charales -

/		1920-60- .*		1990-2000- .	
1.	<i>Chara aculeolata</i>	+		+	
2.	<i>Ch. aspera</i>	+		+	
3.	<i>Ch. braunii</i>	+		-	
4.	<i>Ch. canescens</i>	+		+	
5.	<i>Ch. connivens</i>	-		+	
6.	<i>Ch. contraria</i>	+		-	
7.	<i>Ch. fragilis</i>	+		-	
8.	<i>Ch. hispida</i>	+		+	
9.	<i>Ch. horrida</i>	+		-	
10.	<i>Ch. schaffneri</i>	+		-	
11.	<i>Ch. tenuispina</i>	+		-	
12.	<i>Ch. uzbekistanica</i>	-		+	
13.	<i>Ch. vulgaris</i>	+		+	
14.	<i>Nitella mucronata</i>	-		+	
15.	<i>Nitellopsis obtusa</i>	+		+	
16.	<i>Lamprothamnium papulosum</i>	+		+	
* - : , 1936; , 1953, 1955; ., 1973; , 1991; «- «-					

(-)
N. mucronata.
 2006
 2007 .
Ch. connivens.
Ch. fragilis *Ch. contraria*,
 (1996).
Ch. braunii,
 , *Ch. braunii*,
 1-
 (- , ,
 2004).
 : - (),
 () (.).
 (Dambaska, 1964), -
Charales,
 (27 %), (33 %) -
 (40 %). () - *Ch. braunii*, *Ch. contraria*, *Ch. fragilis* *Ch. tenuispina*. () - *Chara aculeolata*,
Ch. canescens, *Ch. connivens*, *Ch. horrida*, *Lamprothamnium papulosum*. ,
 () - *Ch. aspera*, *Ch. hispida*, *Ch. vulgaris*, *Ch. uzbekistanica*, *Nitella mucronata*, *Nitellopsis obtusa*. ,
Ch. braunii, *Ch. contraria* *Ch. fragilis*,
 (Dambaska, 1964; Hussain, Khohja, 1999),
Nitellopsis obtusa
 (. , -), 1920- .
 , (, 1936).
 1960- . (,
 . .) (- , 1980).
Chara canescens , .
 , , -
 (Stewart, Church, 1992; - , , 2004). 1920- .
Charales -

(, 1936). *Ch. canescens*
 (, -),
 (,)
 -), (, 1936;
 1953, 1955).
 ,
 (, 1936).
Ch. canescens) (, 1936).
 (-
 , , ,
) *Ch. canescens* .
 (1996).
 -
 . (,
 -) *Ch. canescens*
 .
Ch. hispida
 .
 . . (, 1936)
 1920- ,
 . . (, 1973)
 1960- . ,
Ch. hispida , , - .
 ,
 , (5-6 ‰),
 ,
 (, 2003).

Charales -
 16 *Chara* (13), *Lamprothamnium* (1), *Nitella* (1)
Nitellopsis (1). *Ch. aculeolata*, *Ch. aspera*, *Ch.*
canescens, *Ch. hispida*, *Ch. vulgaris*, *L. papulosum* *Nitellopsis obtusa*.
Ch. connivens, *Ch. uzbekistanica* *N. mucronata*.
Ch. braunii, *Ch. contraria*, *Ch. fragilis*, *Ch. horrida*, *Ch.*
tenuispina *Ch. schaffneri* .
Ch. canescens, (1996).
Ch. aculeolata, *L. papulosum* *Nitellopsis*
obtusa. , *Ch. vulgaris*

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A CONTRIBUTION TO THE FLORA OF CHARALES OF THE SOUTHWEST UKRAINE

A taxonomic list of *Charales* of the southwest Ukraine (comprising original and literature data) with synonyms, distribution in Ukraine and general distribution is given. It contains 16 species belonging to *Chara* L. (13), *Lamprothamnium* J. Groves (1), *Nitella* C. Agardh (1), and *Nitellopsis* Hy (1). Recently ten species have been found in the investigated territory including three new ones (*Ch. connivens* Salzm. ex A. Braun, *Ch. uzbekistanica* Hollerb., *N. mucronata* (A. Braun) Miq. in H.C. Hall). However, *Ch. braunii* C.C. Gmelin, *Ch. contraria* A. Braun ex K. tz., *Ch. fragilis* Desv. in Loisel., *Ch. horrida* Wahlst., *Ch. tenuispina* A. Braun, and *Ch. schaffneri* (A. Braun) Allen known from the previous references have not been revealed. The growth areas of *Ch. aculeolata* K. tz. in Rchb., *L. papulosum* (Wallr.) J. Groves, *Nitellopsis obtusa* (Desv. in Loisel.) J. Groves and *Ch. canescens* Desv. et Loisel. in Loisel. (Red Book of Ukraine species) have strongly reduced. Maybe these changes in the flora of *Charales* of the southwest Ukraine connect with anthropogenic impact and general increasing of salinity in inland water bodies of the investigated territory.

Key words: flora, *Charales*, southwest Ukraine.

Charales
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//
14. - : , 1983. - 190 .
(Charophyta) //
. IX. - : . - 1991. - 196 .
()// . - 1999. - 49. - 68-71.
- . Charophyta ()// . - 1998. - 8,
1. - 14-22.
- . Charales // . -
2006. - 16, 4. - 453-458.
- . Charales ()// . - 2004 .
- 14, 2. - 178-184.
- . Charales // . - 2004 . - 14,
4. - 399-412.

- ... // ... - 1953. -
31. - 154-189.
- ... // ... -
1955. - **145**, 7. - 181-196.
- ... //
... , 1973. - 67-74.
- ... *Charophyta* // ... - 1936. - **15**, 7. - 65-69.
- ... // ...
... - 2002. - **59**, 2. - 179-183.
- ... :
... , 1980. - 136 .
- ... // ... - 2003. - **13**, 2. - 167-176.
- ... *Chara uzbekistanica* Hollerb. //
... - 2005. - **15**, 2. - 230-235.
- ... // ...
... - 2004. - **4**, 7. - 108-115.
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21.02.08