

(577.112:582.232):581.524.13

...

- , 12, 04210 ,

50 % 40-240 %

. B

( , 1980; , 2008; Bednarz, Cierniak, 1983; Bagchi et al., 1990; , 2005, 2008).

1967; , 2007).

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(*Anabaena variabilis* Kütz. HPDP-4; *Microcystis aeruginosa* Kütz. emend. Elenk. HPDP-6; *Oscillatoria neglecta* Lemm. HPDP-25) (*Acutodesmus obliquus* (Turp.) Tsar. HPDP-104; *Desmodesmus communis* (Hegew.) Hegew. HPDP-109; *Selenastrum gracile* Reinsch. IBASU-A 317; *Monoraphidium contortum* (Thur.) Kom.-Legn. IBASU-A 364; *Tetraedron caudatum* (Corda) Hansg. IBASU-A 277).

( ..., 1975).

( ..., 1975).

(1 1 )  
7

( ..., 1975).

( .1).

*Tetraedron caudatum.*

*Chlorophyta Cyanophyta.*

(Cyanophyta) *Nostoc* -  
 17,0-29,9 % ( , 2007).  
 5,8 62,0 %  
 ( , 1973).  
 « »  
 25-28 %, ( ) 9,5 % ( , ,  
 1978). 24 ( )  
 4-20 %, -  
 ( ., 2008).

1.

7-

	(% )
<i>Oscillatoria neglecta</i>	18,4±1,1
<i>Microcystis aeruginosa</i>	10,4±1,0
<i>Anabaena variabilis</i>	9,8±0,7
<i>Acutodesmus obliquus</i>	5,3±0,4
<i>Selenastrum gracile</i>	4,2±0,4
<i>Desmodesmus communis</i>	4,7±0,4
<i>Monoraphidium contortum</i>	2,8±0,2
<i>Tetraedron caudatum</i>	7,4±0,5
<i>Oscillatoria neglecta</i> + <i>Acutodesmus obliquus</i>	5,7±0,5
<i>O. neglecta</i> + <i>Selenastrum gracile</i>	5,2±0,5
<i>Microcystis aeruginosa</i> + <i>Anabaena variabilis</i>	16,3±1,1
<i>Desmodesmus communis</i> + <i>Monoraphidium contortum</i>	12,9±1,0
<i>D. communis</i> + <i>Tetraedron caudatum</i>	8,5±0,7
<i>Monoraphidium contortum</i> + <i>T. caudatum</i>	9,7±0,6

( . 2).

2.

	(%)	
		7
<i>Desmodesmus communis</i> + <i>Monoraphidium contortum</i>		
<i>Desmodesmus communis</i>	52,6	48,1
<i>Monoraphidium contortum</i>	47,4	51,9
<i>D. communis</i> + <i>Tetraedron caudatum</i>		
<i>Desmodesmus communis</i>	45,6	59,2
<i>Tetraedron caudatum</i>	54,4	40,8
<i>Monoraphidium contortum</i> + <i>T. caudatum</i>		
<i>Monoraphidium contortum</i>	45,0	59,5
<i>Tetraedron caudatum</i>	55,0	40,5

( . 3).

3.

	/		
	-	*	/ - , %
<i>Microcystis aeruginosa</i> + <i>Anabaena variabilis</i>	162,8	100,7	161,7
<i>Desmodesmus communis</i> + <i>Monoraphidium contortum</i>	129,0	37,5	344,0
<i>D. communis</i> + <i>Tetraedron caudatum</i>	85,4	60,3	141,6
<i>M. contortum</i> + <i>T. caudatum</i>	97,2	50,6	192,1
<i>Oscillatoria neglecta</i> + <i>Acutodesmus obliquus</i>	57,3	118,6	48,3
<i>O. neglecta</i> + <i>Selenastrum gracile</i>	51,7	112,7	45,9

\* -

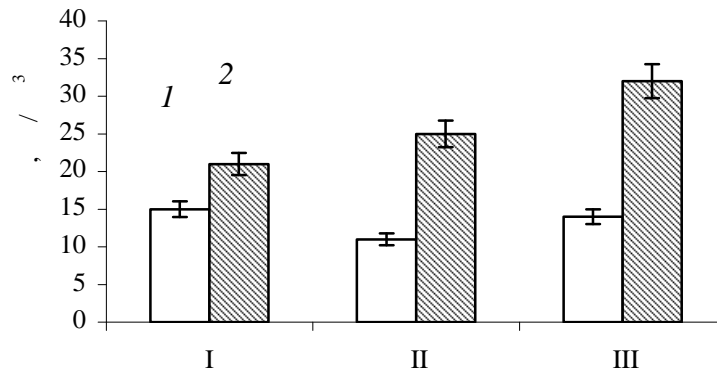
(*Microcystis aeruginosa* + *Anabaena variabilis*)  
 (*Desmodesmus communis* + *Monoraphidium contortum*, *D. communis* + *Tetraedron caudatum*, *M. contortum* + *T. caudatum*)

Cyanophyta

( .1).

( .2).

*Microcystis aeruginosa* + *Anabaena variabilis*  
*Desmodesmus communis* + *Tetraedron caudatum*

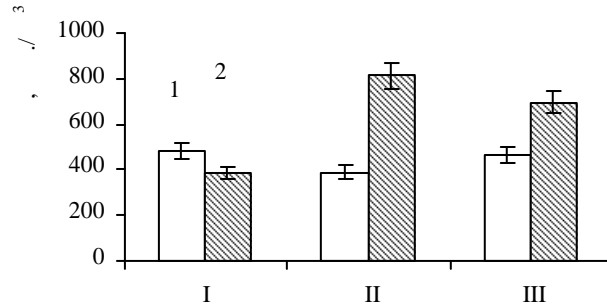


. 1. *Microcystis aeruginosa* (I), *Anabaena variabilis* (II)  
 (III) (1) (2)

( , , 1987).

(, 2007).  
 15000 110000 (,  
 , 1987).

30 %,  
 5-10 ,  
 2,5 %



. 2. *Tetraedron caudatum* (I), *Desmodesmus communis*  
 (II) (III) (I) (2)

(, 1960).

(Tomasovic et al., 1983; Tomasovic,  
 Koval, 1985),

*Oscillatoria neglecta* *Acutodesmus obliquus* *Selenastrum*  
*gracile*, *A. obliquus* *S. gracile*

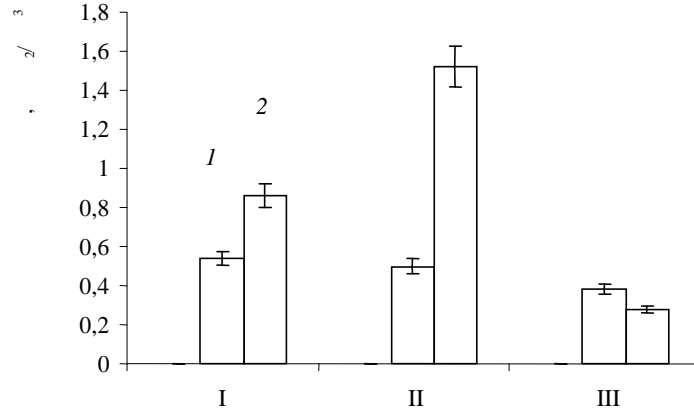
2 .

30-

37 %  
*O. neglecta* *S. gracile*

30 %,

( .3).



.3.

*Selenastrum gracile* (I), *Oscillatoria neglecta*

(II)

(III)

1 (I) 7 (2)

( , , 1987).

( ., 2007).

( , 1970).

-2009.

*N.I. Kirpenko, A.V. Kureischevich*

Institute of Hydrobiology, National Academy of Sciences of Ukraine  
12, Geroev Stalingrada Pr., 04210 Kiev, Ukraine

#### PROTEIN CONTENT IN THE BIOMASS OF UNIALGAL AND MIXED CULTURES OF ALGAE

The protein content in the biomass of unialgal and mixed cultures of some green and blue-green algae was investigated. It was revealed that in mixed cultures the content of proteins sufficiently differed from the expected indices. Depending on peculiarities of the growth, the quantity of endogenous proteins in mixed cultures may be increased (more than 50%) or decreased (40-240%) compared to average indices of protein content in monocultures.

*Keywords* : unialgal, cultures, mixed cultures, quantity of endogenous proteins.

... .., 1973. – 336 .

... .., 1987. – 232 .

( )// . – 2008. – **18**, 1. – .21-28.

... .. // . – 2005. – **41**, 3. – .58-71.

// . – 2008. – **44**, 5. – .83-93.

*Tetraedron caudatum* *Desmodesmus communis*



// . . . . - : . . . . - . 416:  
 . - : , 2008. - . 256-264.  
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 2007 ., - . - 2007. - . 19-20.  
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 . 1. - : . . . . , 1970. - . 128-134.  
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**64**, 1. - . 132-139.  
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 . . . . ( . . . . , 11-14 . 2007 .). -  
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 . - . : . . . . , 1960. - 254 .  
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 1978. - 232 .  
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