



92:582.26

450000 , . , 3 ,

EUSTIGMATOS MAGNUS (J.B. PETERSEN) HIBBERD

(EUSTIGMATOPHYTA) ()

Eustigmatos magnus (J.B. Petersen) Hibberd 1981, syn.
Pleurochloris magna J.B. Petersen 1932, -

Eustigmatos magnus (J.B. Petersen) Hibberd 1981
(syn. *Pleurochloris magna* J.B. Petersen 1932) *Eustigmatophyta*,
Eustigmatophyceae, *Eustigmatales*, *Eustigmataceae*.¹
Eustigmatos magnus, -
Eustigmatophyta.

(, 1965).
(- , 1980; ., 1981; ., 1994).
2001).

135 , . . - 75 (,
, 1984).

(1979) *P. magna*
3,8.
(, 1971; , 1990; .,
2001).

3900-4200 *E. magnus*
(, 1978).

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¹ - *Eustigmatos magnus*.

magnus (). - *Eustigmatos* -
 , . . . , , 1994; ., 1975;
 , 1995; , 1998;). , . . .
 . . . (1994), *P. magna* -
 , , , . - , -
E. magnus -
E. magnus (-
 ., 1980).

E. magnus

1973 .
Eustigmatos magnus
 « »
 , -
 () , . . .
 (, . . .)
E. magnus.
 , - ,
 , . . . (40-
 50)
 (-) -
 80-100 %
E. magnus , - ,
 , , ,
 « » 5
 (), 4 1 ,
E. magnus 15-
 : 1 - -

.....

1-3 ; 2 - 4-10; 3 - 10 .
 « ».
 - 15. *E. magnus* 1 ,
 (), 1 .
 15-14 , *E. magnus*
 .
E. magnus
 (, , 1994): = /1500, - %; -
 ; 1500 - ,
 ,
 0 1. = 0
 = 1
 (15).

, - , - -
E. magnus ,
 ,
 ,
 , -
 , -
 ,
 (. 1).

1. () ***Eustigmatos magnus* (J.B. Petersen) Hibberd**

()	-	,	,			,			,			
			,									
			3	5	10	3	5	10	3	5	10	
-		3	15	8	11	15	1	15		15		0,25
		4	3	3	15	3	15	15		3	6	0,25
	1			6	10		15	15	8	15	10	0,23
	-	2	6	9	13	-	-	-	-	-	-	-
. « » - ; «->» - ; - -												

1. *E. magnus* -
E. magnus -
E. magnus (. . 1).

E. magnus
E. magnus
E. magnus
 2 -4 (4- -2- -), (S-2,3,3-
 - N-N- -), (1,1'- -2,2'- -
) 0,2-16,0 /
 (, 1977).
 (. 2).
E. magnus,

2. () *Eustigmatos magnus* (J.B. Petersen) Hibberd

2 -4					
, /		, /		, /	
	9		9		9
0,2	6	0,4	4	1,0 ()	1,0
0,4	9	0,8 ()	3	2,6 ()	1,0
0,8	6	1,6 ()	3	4,0	1,0
1,6 ()	7	6,4	7	8,0	1,0
16,0	5	16,0	1		
: - .					

0,1-1,0 % ().

E. magnus (1,5-4,0 %) -
E. magnus.
 7 % -

E. magnus
 W-OFP-100 (17) -
 (6) 10 - 20 -14 -
 - 9 - 10, 14
 2 -1317-12 - 13 -
 17 - -
 0,2; 1,0; 2,0; 4,0; 10,0; 20,0 1 -
 - (.3).
) (

E. magnus.
 2 : -14 - 0,83, 2 -
 1317-12 - 0,83, W-OFP-100 - 0,64.
 = 0,05.

3. () *Eustigmatos magnus*
 (J.B. Petersen) Hibberd

	1 -						
		0,2	1	2	4	10	20
-14	5	1	1	-	-	-	-
2 -1317-12	11	7	1	-	-	-	-
W-OFP-100	6	7	7	7	3	2	-
L92	1	1	2	-	-	-	-
L35	1	2	1	1	4	-	-
: «-» - <i>E. magnus</i>							

E. magnus
 , 50-70 .
 , 50 ,
 . 10-12 ,
 ,
 30-35 ,

30-40

5-10

200-250

4.

Eustigmatos magnus

()

	.1	.2	.3	.4
		6	4	13
			13	9
: .5: « » – <i>E. magnus</i>				

.4

.1.

.2.

E. magnus

E. magnus.

0,007-7,0³ 40
45 160 /

(. 5).

E. magnus,

5.

Eustigmatos magnus ()

, ³ 40		N ₄₅ P ₄₅ K ₄₅	N ₁₆₀ P ₁₆₀ K ₁₆₀
-	1	1	15
0,007			10
0,07			1
0,7			
7,0			

-72 *E. magnus*

E. magnus, 0,002 0,2 1 0,4

LC₁₀₀ 50 %- LC₅₀

: CuSO₄•5H₂O, ZnSO₄•7H₂O, MgSO₄•5H₂O.

E. magnus LC₅₀
 - 0,5 / ; LC₁₀₀ = 0,01 / ; = 2,0 / ; = 0,1 / .

E. magnus

E. magnus

E. magnus 7,5

E. magnus 15 3 4 2 - 5

E. magnus

11-12 2

20-90 % 2,5-4,0

4,5 8,5 9-10,5 30-80 %

E. magnus

20-100 « » 10 20-
E. magnus

20-30 40-50 60-70

40-45 % 80-90

50-60 %

100 *E. magnus*.
 30-40

Cyanophyta.

E. magnus 1988-1989

1988

E. magnus 1,5 2 (250) 5 15

17 5 - 872 , 15 - 397.

E. magnus 250 - 2 , 15 - 9

5 - 3

Eustigmatos magnus

E. magnus (. 6, 7).

6.

Eustigmatos magnus

	1	2	3	4	5	6	7	8
	0,785	1,007	0,700	1,002	0,860	0,568	0,595	0,775
	0,940	0,736	0,970	0,920	0,941	0,630	0,730	1,125
	0,943	0,560	0,697	0,800	0,312	0,969	0,910	1,485
	0,578	0,820	0,670	0,566	0,595	0,535	0,683	0,940
	0,600	0,541	0,735	0,690	0,662	0,853	0,587	-
: «-» - .								

7.

(),

.6

	1	2	3	4	5	6	7	8
	0,80	1,03	0,71	1,02	0,88	0,58	0,61	0,79
	0,96	0,75	0,99	0,94	0,96	0,64	0,74	1,15
	0,96	0,57	0,69	0,82	0,32	0,99	0,93	1,52
	0,59	0,84	0,68	0,58	0,61	0,55	0,70	0,96
	0,61	0,55	0,75	0,70	0,68	0,87	0,60	
. 0,98.								

40

2

E. magnus

E. magnus

(, 1995): = / , -
(

); - - ; -

E. magnus.

0 , - . ,
 (, 1995).
 (, 1995), 6

	()	
VI()	> 1,10	- , -
V()	0,91-1,10	- , -
IV()	0,71-0,90	-
III()	0,50-0,70	-
II()	< 0,50 (LD ₅₀ ,)	-
I()	-	-

, - , ()
),
 , . - , -
 , - , -
 .
E. magnus.
 (-)
 (-) (V-)

Eustigmatos magnus

E. magnus (J.B. Petersen) Hibberd (*Eustigmatophyta*) in Southern Ural (Russia). The species is widespread in the Southern Ural region, where it is found in various habitats, including forests, meadows, and open areas. It is characterized by its unicellular structure and its ability to tolerate a wide range of environmental conditions. The distribution of *E. magnus* is closely related to the presence of organic matter and its role in the soil ecosystem.

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PECULIARITIES OF ECOLOGY AND DISTRIBUTION OF UNICELLULAR SOIL ALGA
EUSTIGMATOS MAGNUS (J.B. PETERSEN) HIBBERD (*EUSTIGMATOPHYTA*) IN
 SOUTHERN URAL (RUSSIA)

Original and literature data on the distribution of soil alga *Eustigmatos magnus* (J.B. Petersen) Hibberd 1981 (syn. *Pleurochloris magna* J.B. Petersen 1932) and how different ecological factors (both natural and anthropogenous) affect it are analyzed and discussed.

Key words: soil algae, populations, distribution, ecology, tolerance.

The distribution of *E. magnus* is closely related to the presence of organic matter and its role in the soil ecosystem. The species is widespread in the Southern Ural region, where it is found in various habitats, including forests, meadows, and open areas. It is characterized by its unicellular structure and its ability to tolerate a wide range of environmental conditions. The distribution of *E. magnus* is closely related to the presence of organic matter and its role in the soil ecosystem.

. . . , 1998. - 170 .
 . . . (,)
 / . . . , 1995. - 125 .
 . . .
 // . - 1994. - 6. - . 16-20.
 . . . (, ,) . - ∴ , 2001. - 300 .
 . . . // . - . . .
 ∴ . . . , 1990. - . 8-13.
 . . . //
 : . . . , 1994. - 94-105.
 . . . //
 :
 . - , 1975. - 39-51.
 . . . « » - // . - 1965. - 2. - . 63-67.
 - . . . - .
 ∴ , 1980. - 2565 .
 . . .
 : - . - 1971. - . 32. - . 18-24.
 . . . : - ∴ ,
 1977. - . 174-178.

 . - ∴ , 1981. - 269 .
 - ∴ , 1976. - 144 .

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