

¹⁵N,

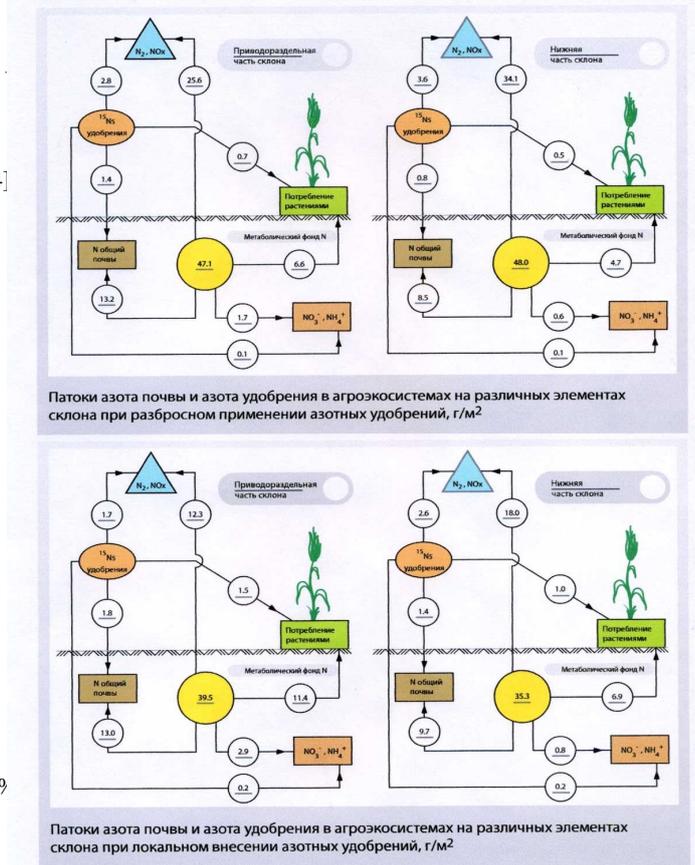
50-60

1,4

¹⁵N

[1-4]

[5].



Потоки азота почвы и азота удобрения в агроэкосистемах на различных элементах склона при разбросном применении азотных удобрений, г/м²

Потоки азота почвы и азота удобрения в агроэкосистемах на различных элементах склона при локальном внесении азотных удобрений, г/м²

» - (. 1).
50 /

(1,5-2,0)

« »- (45-50%

23-27%

/)

¹⁵N [5].

(.).

6-7

1. / 2, %, (- .2: 1 - 3-5 ⁰ ;	3 - 2-3 ⁰ ; 2 -		« » N			
	N					
50 50 ()-	1	4,69	-	4,69	-	-
	2	4,52	-	4,62	-	-
	3	3,33	-	3,33	-	-
+ ¹⁵ N ₅₀ -	1	7,36	0,73	6,63	1,94	15
	2	6,82	0,60	6,22	1,60	12
	3	5,24	0,50	4,74	1,41	10
+ ¹⁵ N ₅₀ -	1	12,32	1,50	10,82	6,13	30
	2	11,46	1,21	10,25	5,63	24
	3	7,91	1,00	6,91	3,58	20
+ ¹⁵ N ₅₀ -	1	9,85	1,16	8,69	4,00	23
	2	9,55	1,01	8,54	3,92	20
	3	6,68	0,89	5,79	2,46	18

36-90%, - 39-111% (.2).

[3].

2.						
		-		%	-	
		/ 2	/ 2		/ 2	/ 2
50 50()-	1	240	-	7,8	396	-
	2	230	-	7,0	312	-
	3	225	-	6,1	256	-
+ N ₅₀	1	330	90	8,7	552	156
	2	310	80	8,0	435	123
	3	305	80	7,1	366	110
+ N ₅₀	1	457	217	10,3	731	335
	2	407	177	11,7	570	258
	3	386	161	8,5	540	284
+ N ₅₀	1	413	173	8,7	605	209
	2	366	136	10,9	512	200
	3	349	124	7,6	454	198
(2 /)		2			1	
, %		22			12	
0,5		10			6	
		12			7	

1. ... , 1997, 240 . 2. ... , 1999, 296 . 3. ...
4. ... , 2001, 360 . 4. ... , 2006, 5, . 12-15. 5. ... , 2008, 185-187 . 6. Fried M., Dean L. A concerning the measurement of available soil nutrients. Soil Sci., 1952, v. 73, 4, . 263-271. 7. ... , 1965, . 10, 4, . 400-407. 8. ... , 1985, 176 .

Control of nitrogen flows on different slope elements

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Summary. The balance of nitrogen was studied at the growing of cereal crops on soddy-podzolic soil on a slope of south-eastern exposition using ¹⁵N-labelled nitrogen fertilizers. The local application of nitrogen fertilizers increased the nitrogen consumption by plants and reduced its loss on all slope elements.

Key words: stable ¹⁵N isotope, slope elements, fertilizer nitrogen balance.