

631.4:631.153.7

... , ... ,
... , 62, 220108, ... ,
- ... -
... : ... , ... , ... -
... -
... , 491,2 ... -
... , ... -
... , ...) [2]. (... -
... , ...) [2].
1. _____ .
... , (... ,
... ,
...).
... :
(1-3, 3-5, 5-7, 7-10°); (... (%))

44

2. _____

30-

10 ()

(30)

30,

3. _____

3.1.

2) : 1) - ; 3) - ;

(/) ()

3.2.

3.3.

3.4.

(/) ()

() ()

(1), (2),

$$A = 1 + 2 = R \times K \times L \times S + h \times L \times S, \quad (1)$$

$A_1 -$; $R -$; $K -$;

$K = f(H, G),$ (2)
 $h = B \times Kc,$ (3)

[1].

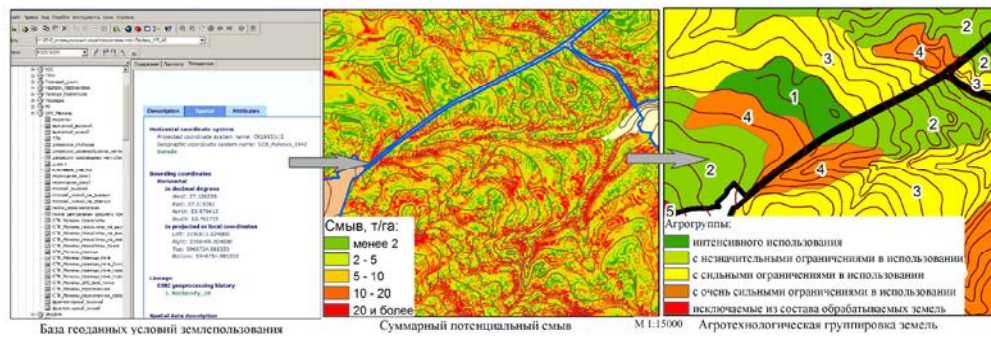
	, %									
	1	2	3	4	5	6	8	10	15	20
	0,04	0,08	0,12	0,16	0,19	0,22	0,28	0,33	0,46	–
	0,10	0,17	0,24	0,30	0,34	0,38	0,44	0,50	0,60	0,67

1) "uklon";
 2) "eros_index";
 3) "zapas_vod";
 4) "soil";
 5) "soil_gumus";
 6) "koef_stoka".

ArcGIS 9.2.

Spline
 ArcGIS 3DAnalyst SpatialAnalyst
 ("izogyps_point"), ("izogyps"), ("H_point"),
 ("uklon") ().

– “flowlenth” –
 ArcGIS
 SpatialAnalyst “flowdir”.
 – “sloy_stoka” –
 “koef_stoka” “zapas_vod” 3.
 “soil_gumus”, “soil_gransostav”,
 “flowlenth”, “uklon”, “sloy_stoka”
 (2) “smyv_sneg”,
 0–1, 1–2, 2–5, 5–10, 10–15, 15–20, 20 / .
 1 2.



База геоданих умови землекористування Сумарний потенціальний смыв М 1:15000 Агротехнологическая группировка земель

. 1.

[3, 4].

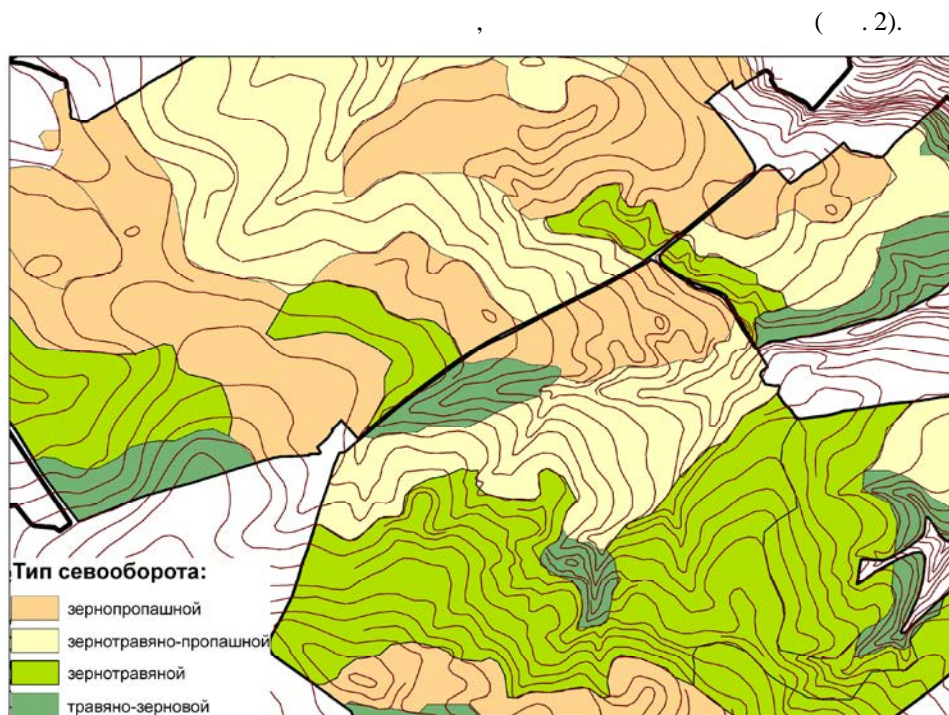
1°.

2,0 / ,

50 /

1–3°.

2,1–5,0 / .



.2.

СПИСОК ВИКОРИСТАНОЇ ЛІТЕРАТУРИ

1. . . . /
. . . . , 1979. – . 75.
2. . . . – (. . . .); [
.] – , 2005. – 52 .
3. / //
23–27 . 2011 . 1. – – . 160–163. ”

4. . . . / . . . , . . . // -
 , - , 26 -1 2011 . /
 . . . ; : , 2011. - . 220–222.
 : 13.03.2013
 16.04.2013
 17.06.2013

GIS MODELLING OF SOILS PROTECTION IN AGROLANDSCAPES ORGANIZATION OF BELARUS

Aleksandr Chervan, Andrey Chernysh, Anna Ustinova

*Institute of Soil Science and Agricultural Chemistry,
 Kazintsa St., 62, BY – 220108 Minsk, Belarus*

The article describes the technology erosion control organization of landscapes using GIS technology. The normatives of soil protection ability of crops, methods of tillage and crop rotation, combined in GIS environment for planning erosion control safe land use are characterized in the article.

Key words: agrolandscape, erosion, soil protection, erosion control measures, GIS, modeling, database.