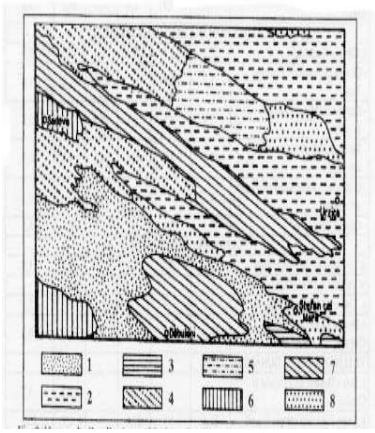

Fig. 3. The map of the soils from Sadova-Corabia system before organizing the soils through levelling and modelling works in order to introduce irrigation

1. Cambic chernozems on sands; 2. Cambic chernozems on loams and sandy loams; 3. Typical cambic chernozems on loess and loessial deposits; 4. Reddish preluviosoils and regosoils; 5. Reddish preluvosoils, including typical luvosoils on sands; 6. Typical luvosoils on reddish loams; 7. Regosoils on sands; sand, sandy regosoils and typical cambic chernozems on sands.

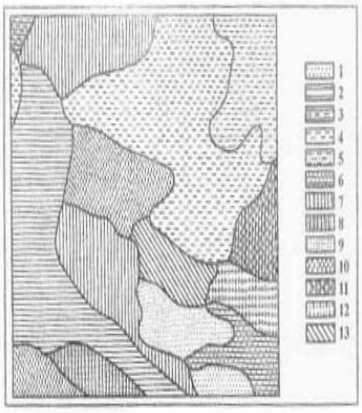

Fig. 4. The map of soils from the Sadova-Corabia system after the levelling and modelling works

1. Typical psamosoils, humidly phreatic; 2. Typical erodosoils with loess sublayer; 3. Cambic erodosoils, strong anthropic coverd; 4. Lamellar argic erodosoils, humidly phreatic; 5. Typical anthropic protosoils covering typical chernozems, humidly phreatic; 6. Typical anthropic protosoils, covering gleic molic psamosoils; 7. Typical anthropic protosoils, covering typical erodosoils, humidly phreatic; 8. Typical anthropic protosoils, covering cambic erodosoils, humidly phreatic; 9. Typical anthropic protosoils, covering gleic erodosoils; 10. Typical anthropic protosoils, covering gleic lamellar argiloluvial erodosoils; 11. Molic anthropic protosoils, covering gleic psamosoils; 12. Molic anthropic protosoils, covering typical erodosoils, humidly phreatic; 13. Molic anthropic protosoils, covering typical gleic erodosoils. In most of the case, the primary sequence of genetic horizons can still be noticed; the soil cover of the organized territory distinguishes by a wide range of blunted soils, their remains of horizons making impossible their categorization into a certain type of soil.

As they are tillage grounds, they present at the surface an Ap horizon that comes from B or C, AC or AB horizon, having less than 20 cm in thickness [5, 8]. The modification of the pedolandscape is also reflected in the chemical properties and the nutients' supply level of the soils. Thus, the reaction of the soils becomes moderately acid to low alkaline (5.4-8.2); 75% of soils end up presenting a low-very low to extremely low humus content (0.5-2.5%) (Fig. 5). The provision with nutrient substances becomes very low in total azote (0.036-0,070%), low in phosphor (11-17 ppm) and very low in potassium (Fig. 6, 7).

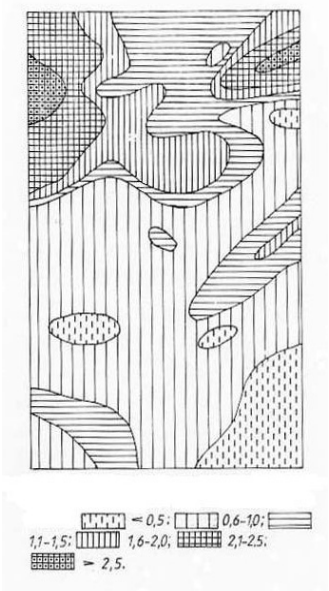

Fig. 5. Humus value (%) of anthropic sandy soils after modelling and levelling

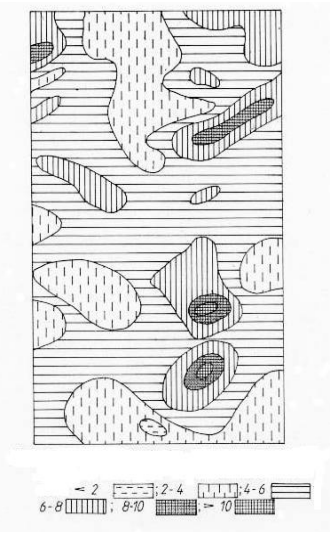

Fig. 6. Mobil phosphor value (ppm) of anthropic sandy soils after modelling and levelling

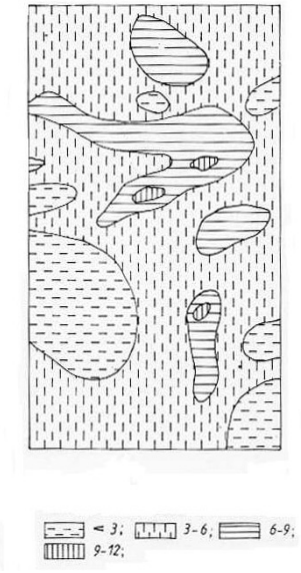

Fig. 7. Potassium value (ppm) of anthropic sandy soils after modelling and levelling

CONCLUSIONS

The preparations of sandy soils for introducing the irrigation system in our country in order to increase the agrarian production led to total change of the soil cover. The process had in view less or not at all the conservation of the superior A horizon of the soil, but the levelling of the lands with the purpose of complete mechanization of the agrarian works and the uniform distribution of water on the levelled surfaces.

The levelling of the sandy lands should start with the uncovering of the humifer material, respectively the superior horizon of soils, its depositing and restoration after the levelling operations, thus the values of soils fertility not only that are maintained at the initial value, but they are even enriched.

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