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"QUALITY - QUANTITY" OF THE BASIC COGNITIVE OPERATIONS OF THE SYSTEMATIC ANALYSIS OF THE CLASSES BY THE TASTE OF THE SEMANTIC NETWORK

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Abstract
Comparison of different economic situations and formation of groups of the most similar ones (clusters), as well as identification of clusters that are most different from each other (constructions). At the same time, the "quality-quantity" construction was revealed in the experimental database, that is, completely opposite and incompatible (that is, impossible at the same time) soils are needed to obtain high-quality and large quantities : predecessors and agrotechnological methods. .

Keywords: clusters, constructs, experimental, technological, reliability, analysis, artifact

INTRODUCTION

Grouping technological factors into clusters and constructs. Constructive analysis of cluster factors showed that some factors, which are different in nature, have a similar effect on economic results. If necessary, these factors are suggested to be used interchangeably.

The test of the ability of the created application to correctly predict the economic results on the array of already entered formalized passports showed that it is not high enough to be used in practice: at the level of 58%. This is due to artifacts, due to which some economic situations are poorly defined. Artifact removal resulted in an increase in integral validity up to 80%, which is sufficient for practical use of the technique.

Thus, two main tasks are solved:

1. Predicting what economic results will be the most (and practically impossible) on a certain type of soil and with these predecessors, as well as using existing agricultural technologies. A measure of the similarity of the predicted state with each future state is shown.
2. Development of recommendations for the selection of control actions, i.e. advising on what soil types, predecessors and agricultural technologies should be in place to be able to calculate with some confidence a certain economic result. To do this, it is enough to show an informational portrait of the given target state.

The "Eidos" system allows you to assess the level of reliability of your forecasts and management recommendations, i.e. it not only gives a recommendation, but also quantifies its level of reliability. In addition, the system describes the impact of each technological method and makes recommendations for replacing necessary, but too expensive or unavailable technological methods with others that are cheaper and more convenient and at the same time have similar effects. will give. about economic results.

RESULTS

Thus, this technique is used to "review" different technology options, to predict the consequences of using different technological methods and, based on this, to select the crop to be grown and develop scientifically based recommendations on the optimal agricultural technology for the purposes allows.

3. In this study *, in a quantitative form* , as already known, the influence of predecessors, soils, fertilizers, plowing methods, etc. was found. about the results of growing crops, as well as new, previously unknown.

Many years of factual material on the cultivation of fruit crops in various environmental conditions have been collected. However, this material is in the form of paper documents of different standards, which does not allow to process it using modern mathematical methods and computer technologies and to determine the cause-effect relationship in the genotype-environment system. The interests of agricultural science and practice require the active use of these data for monitoring, analysis, forecasting and support of management decisions on the production of fruit crops and varieties.

In this section, separate and auxiliary problems are formulated, which are necessary to solve the problem of predicting the quantitative and qualitative results of growing a certain crop at a certain point. These are determination of cause-and-effect laws between metafactors and growth results, prediction of phenophase periods according to the dynamics of meteorological parameters, as well as triangulation and spatial interpolation tasks. The relationships between these tasks are shown in the context of revealing the logic of solving the main task.

Prediction of quantitative and qualitative results of cultivation of various crops at given points (microzones). Based on the solution of this main task for different crops and growing areas, the following two sub-tasks can be solved :

1. Opportunities to grow a given crop in different microzones.

The possibilities of growing different crops in the given microzone were determined.

The results of solving subtask 1 are presented in the form of regional geographic maps in a visual and convenient form of geoinformation visualization for decision-making, where zones with the same potential for growing a certain crop are colored with one conditional color.

Solving the main problem consists of two stages .

At the 1st stage , the cause-and-effect relationship between the weather conditions and the results of crop production is determined.

The knowledge of causal relationships identified in step 2 is used to predict the quantitative and qualitative results of growing a particular crop at a given growth point.

DISCUSSION:

We assume that the biological potential of a geographical point is determined by the long-term dynamics of meteorological parameters at this point.

It should be noted that the impact of soil and agricultural technologies is not taken into account in this study, but the proposed mathematical models and software tools that implement them are also suitable (there is positive experience in this direction).

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laws of influence of the dynamics of meteorological indicators on the transition of the crop from one phenophase to another and on the quantitative and qualitative results of its cultivation are determined only by the genotype . of a given crop and does not change from point to point and over time for a given crop. If this hypothesis is correct, then the laws of the influence of environmental factors on the results of crop cultivation, determined on the basis of the processing of empirical data obtained in a certain period of time, are used to predict the results. growing this crop at other points. It is known (Dragavtsev AP) that the influence of the same meteorological indicators on the quantitative and qualitative results of crop cultivation depends not only on the values of these meteorological parameters, but to a large extent on the phenophase. these parameters worked. Therefore, all meteorological data should be related not only to physical (calendar) time, but also to phenophase periods, which describe the speed of biological time for different cultures.

Basically, many laws of the influence of meteorological conditions on growth results are known and described in specialized literature, including by the authors of this study. However, in order to achieve the goal of research, all these problems must be solved at a new quality level corresponding to the current level of development of mathematical methods and information technologies, in particular, within the framework of one instrumental system. The fact is that the solution of these problems implemented in different instrumental systems does not provide an opportunity to exchange information between them and, therefore, to do real research and forecasting in the industrial mode.

Let's see in detail how the main task is divided into a sequence of steps, separate and auxiliary tasks .

For each value of each meteorological parameter operating in a certain phenophase, the strength and direction of its influence on the quantitative and qualitative results of growing each specific crop is determined.

However, there may not be a meteorological station to record meteorological parameters at a given growth point.

Determining the values of meteorological parameters at a certain point by weighting the values from the values at the location of the three nearest meteorological stations, taking into account the corrections for relief and distance , in turn, involves the initial solution of the problem . triangulation: determining the three closest weather stations to a given point by geographic coordinates of that point and weather stations. The last task is related to the need to transform the values of meteorological parameters known for the irregular network (grid) with meteorological stations in the nodes into a regular network of potential growth points, which is more convenient for them. geoinformation visualization.

CONCLUSIONS:

The beginning and ending periods of different phenophases for different crops are unknown for potential growing points, which are necessary to predict quantitative and qualitative results .

Therefore, the problem arises on the basis of processing empirical data about the phenotypic development conditions and dynamics of various crops in specific microzones. to determine the causality of the influence of the dynamics of meteorological parameters on the start and end dates of the phenophases for these crops .

LIST OF REFERENCES

1. Markova TV Ethics of business relations. Phoenix. - 2009. - 252 p.
2. "Methodist". Scientific-methodical magazine. - 2011. - No. 7. - B.44-50.
3. Sigidov Yu.I. Organizational and economic problems of increasing the efficiency of agricultural production. - Krasnodar. 2001, 414 p.
4. Stabin IB, Moiseeva VS Automated system analysis. -M .: Mashinostroenie, 1984. - 312 p.
5. Temnikov FE, Afonin VA, Dmitriev VI Theoretical foundations of information technology. - M.: Energy, 1979. - 511p.
6. Volkova VN, Denisov AA Fundamentals of systems theory and system analysis - St. Petersburg: Publishing House of St. Petersburg State Technical University, 1997.
7. Dragavtsev VA Management of the productivity of agricultural crops based on the laws of their genetic and phenotypic changes in changing environmental boundaries / VA Dragavtsev, IA Dragavtseva, LM Lopatin. - Krasnodar: SKZNIISiV, 2003. - 208 p.