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article

## Development of expert systems to improve the efficiency of growing plants in agriculture

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**Annotation.** The article discusses a promising way to improve the productivity of agriculture, namely main problems of developing and implementing expert decision support system. The article proposes the structure of an agriculture expert system for determining plant diseases and considers the issues of representing professional knowledge as part of a recommender system with the help of an ontological knowledge base. The interface of the expert system in the form of a web application is described, and a variant of the interaction of the elements of the recommender system with the web application is implemented.

*Key words:* expert systems, knowledge bases, recommender systems in agriculture, expert systems, knowledge bases, recommender systems in agriculture, web application development, information technology

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