Ontology of Crop Pest Control

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ABSTRACT ORIGINAL

Domain ontology of crop pest control consists of hierarchically structured biological and chemical information and concepts on crops, pests, pest control measures and relations among them. Despite vertical relations in hierarchies, the knowledge about crop protection measures leads to horizontal relations between classes biological and chemical objects. There is analogy between class objects in biological classification of crops, pests and pest control measures from one hand and from the other hand class objects and instances of object oriented programming. The developed domain ontology has characteristics of task ontology because it leads to building analytical models, data analysis and solving practical problems. Classification of tasks and applications based on the domain ontology is in the scope of this work, as well. The main aim of the ontology is the development of intelligent computer based systems intended to satisfy specific informational needs of the professionals and practitioners in agronomy, crop protection, plant medicine, economics and business. © 2020 ACM.