

Wine Quality Assessment under the Eindhoven Classification Method

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ABSTRACT

The identification, classification and recording of events leading to deterioration of wine quality is essential for developing appropriate strategies to avoid them. This work introduces an adverse event reporting and learning system that can help preventing hazards and ensure the quality of the wines. The *Eindhoven Classification Method (ECM)* has been extended and adapted to the incidents of the wine industry. *Logic Programming (LP)* was used for *Knowledge Representation and Reasoning (KRR)* in order to model the universe of discourse, even in the presence of incomplete data, information or knowledge. On the other hand, the evolutionary process of the body of knowledge is to be understood as a process of energy devaluation, enabling the automatic extraction of knowledge and the generation of reports to identify the most relevant causes of errors that can lead to a poor wine quality. In addition, the answers to the problem are object of formal evidence through theorem proving.