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Plant Pathogen Interactions Ontology (PPIO)

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Abstract. Plant-pathogen interactions are an important knowledge domain within plant biology and biotechnology, both scientifically and in economic terms. Unlike other knowledge domains within life sciences, however, semantic technologies have not been used extensively to codify it; therefore, there is a lack of axiomatic models amenable to automated integration and inference. We present the Plant-Pathogen Interactions Ontology (PPIO), a first step towards the axiomatization of plant-pathogen interactions knowledge. PPIO encourages consistent annotation and supports both query and inference.

Keywords: Plant pahogenic bacteria, Ontologies, Semantic Web

1. Introduction

2. Modelling

2.1. Desing principles

3. Creation methodology

4. Discussion (comparison with other ontologies on the same topic, pointers to existing applications or use-case experiments)

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