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## **Assembled and Annotated Genome of *Plasmodiophora brassicae* with Insights into Developmental Stage-Specific**

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*Plasmodiophora brassicae* is a major disease threat for Brassica oil and vegetable crop production worldwide. The causal agent is a Plasmodiophorid, which are obligate biotrophic plant-pathogenic protists in the Rhizarian kingdom. Although the Plasmodiophorids include other important agricultural pathogens such as *Polymyxa betae*, *Spongospora subterranea*, their biology remains poorly understood due to their intracellular biotrophic life style. I will present the assembled and annotated genome of *P. brassicae*, with insights into developmental stage-specific. We provide the first genomic data for pathogenic Rhizaria. The exploitation of the life stage specific transcripts will shed light in the understanding of the life cycle at a molecular basis, which will in the long run help to understand and control club root disease. Our data also fill an important gap for the understanding of the eukaryotic tree of life, since this is only the third genome of the eukaryotic kingdom of Rhizaria.