De novo assembly and phasing of dikaryotic genomes from two isolates of *Puccinia coronata* f. sp. *avenae*, the causal agent of oat crown rust.

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Summary:
This paper, describing the first release of a haplotype-phased genome assembly for a dikaryotic fungal species, demonstrates the suitability of using emerging genomic technologies to investigate genetic diversity in populations of *Puccinia coronata* f. sp. *avenae,* the organism responsible for crown rust infection of oats.

A press release describing these results, as well as those from an accompanying paper on the genotyping of the wheat stripe rust fungus, *P. striiformis* f. sp. *tritici*, can be found here: https://www.eurekalert.org/pub_releases/2018-02/uom-spt022018.php.

A short, plain-language video describing the work has also been made available: https://youtu.be/-0poaY1S3Ww.