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A rapid storage method for long-term storage of *Cercospora beticola*

It will be a poster and prefer it to be in the Entomology & Plant Pathology section

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A rapid storage method for long-term storage of *Cercospora beticola*.

Cercospora beticola, cause of Cercospora leaf spot in sugarbeet, is a slow growing fungus that can be very time consuming and somewhat difficult to store long-term. Long-term storage is needed for consistent isolates to use in studies on pathogen diversity and changes in factors such as fungicide sensitivity. Previous storage methods could take two or more weeks to get the isolates of *C. beticola* stored. The new method uses a liquid shake culture of the fungus in half-strength V8 media and produces small fungal balls of *C. beticola* in four to five days. The fungal balls are harvested, rinsed with sterile distilled water, and air dried in a 100x10mm petri dish overnight in a biosafety cabinet. The dried fungal balls are stored in 1.5 mL screw cap tubes and kept at either -20C or -80C. Fungal isolates that had been stored for more than five years in these storage conditions were tested for viability and pathogenicity on sugarbeet. All isolates were able to grow on V8 media and caused lesions on sugarbeet leaves in high humidity greenhouse conditions. The new fungal ball storage method greatly reduces the time and resources spent on storing *C. beticola*, which is a big boost in productivity for people in the lab.