



# Lettuce Downy Mildew Indexing and Screening Services

## **About TriCal Diagnostics**

TriCal Diagnostics is a team of highly experienced plant pathology diagnosticians that has extensive knowledge of practical field plant pathology, microbiological and molecular identification techniques, plant pathology research, and production agriculture and horticulture. In addition to plant disease diagnostics, we offer indexing and screening services for lettuce and downy mildew disease.

## ***Bremia lactucae* Indexing**

Index lettuce lines and cultivars for resistance/susceptibility to *Bremia lactucae* in a 24-compartmentalized box. Inoculate and monitor disease development. Disease results are evaluated twice. Tests usually take 4 to 5 weeks to complete.

Twenty lines (20 to 30 seeds for each line) of lettuce can be screened for reaction to *Bremia lactucae* CA races 7, 8, 9, and some novels.

**Cost per box (20 lines) for one race: \$300**

## **Resistance Screening**

Screen for resistance/susceptibility to *Bremia lactucae* for lettuce planted in trays. Inoculate and monitor disease development. Disease results are evaluated twice. Susceptible plants are rogued and the resistant survivor plants are returned to the submitter for seed production. Tests usually take 2 to 3 weeks (starting with seedling trays) to complete. Lettuce seed: cost is determined on a per cultivar/accession basis when client provides the seeds.

Lettuce seedlings (planted trays): cost is determined on an hourly basis when the client provides seedling trays: **\$200/hour**.

Receiving survivor lettuce: A CDFA permit is required for the client to receive back survivor plants. Submit the completed state form to CDFA personnel dealing with permits. When contacting CDFA, indicate that you are working with TriCal Diagnostics and wish to receive lettuce survivors for resistance breeding.

For questions and for the CDFA permit form please contact Dr. Hanane Stanghellini (hstanghellini@trical.com).