



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*. Inoculate and monitor disease development. Disease results are evaluated twice. Tests usually take 4 weeks to complete.

Twenty lines (20-30 seeds for each line) of lettuce can be screened for reaction to *Bremia lactucae* CA races 5, 6, 7, 8 or 9.

Cost per box (20 lines) for one race: \$200

Resistance Screening

Screen lettuce for resistance/susceptibility to *Bremia lactucae*. 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 4 weeks (starting with seed) or 2 weeks (starting with seedling trays) to complete. Lettuce seed: cost is determined on a per cultivar/accession basis when client provides seeds.

Twenty lines (10-20 seeds for each line) of lettuce in one box: cost per box (20 lines) for one race: \$200

Lettuce seedlings (planted trays): cost is determined on an hourly basis when client provides seedling trays: 1 to 5 trays \$150/hour, 5 or more trays \$100/hour.

Receiving survivor lettuce: A CDFA permit is required to receive back survivor plants (see attached form). Submit the completed form to Raj Randhawa (raj.randhawa@cdfa.ca.gov) or other 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. Our lab can autoclave the old test materials for you.

For questions please contact Dr. Hanane Stanghellini (HStanghellini@trical.com).