

# Evaluating the Survival of *Phytophthora ramorum* in Firewood<sup>1</sup>

John Shelly<sup>2</sup>, Ramnik Singh<sup>2</sup>, Christine Langford<sup>2</sup>, and Tad Mason<sup>3</sup>

## Abstract

Many of the *Phytophthora ramorum* host species are a favored source for the commercial firewood industry. This study addresses the viability of *P. ramorum* in processed firewood and analyzes the unknown risk of spreading *P. ramorum* by transporting and storing firewood products produced from *P. ramorum*-diseased trees. Preliminary data from an earlier study suggested that *P. ramorum* spores could survive on firewood for at least 6 months. Positive *P. ramorum* cultures were isolated on eight of 49 freshly cut specimens and one of 30 specimens that had aged (air-dried) for 6 months. Following these initial results, a larger study was initiated. Approximately 7 tons of split firewood was selected from tanoak trees exhibiting the symptoms of sudden oak death, and stored at a commercial firewood operation in Marin County with ambient temperature, humidity and rainfall data being monitored and recorded. A similar amount of firewood, selected from the same diseased trees, is stored at the Richmond Field Station, University of California, on an outside concrete pad with simulated rain exposure reflecting periods of exceptionally high rainfall. Firewood specimens, as well as water collected from the firewood pile runoff, are periodically tested for presence of viable *P. ramorum* propagules.

*Key words:* *Phytophthora ramorum*, firewood, disease spread, sudden oak death, tanoak, Marin County

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<sup>2</sup> Richmond Field Station, University of California, 1301 South 46<sup>th</sup> Street, Richmond, California 94804; john.shelly@nature.berkeley.edu

<sup>3</sup> TSS Consultants, 2724 Kilgore Road, Rancho Cordova, California 95670.