Sudden Oak Death Bike Tire Scrubber[1]

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Abstract

One source of inoculum for potential dispersal of *Phytophthora ramorum* is infested sediment on bicycle tires of visitors entering open-space land. This is a serious concern as recreational users may travel from an infested to a non-infested area in a short period of time. A prototype scrubber has been built to address this issue for mountain bike users of public parks and recreation areas. The device reduces accumulated soil and mud, decreasing the potential inoculum load on tires of mountain bikes before they leave an infested area. This scrubber is intended for areas without electricity, pressurized water, or personnel, and must be affordable, simple to operate, and easy to maintain at trailheads. The current design is essentially a trough of tough bristles through which the rider walks their bike. The motion of the bike provides all the power. In preliminary tests 75 percent of the adhered sediment was removed from the tire tread. Comparison with a competing design is discussed and recommendations for installation at trailheads are made. This scrubber is suggested as part of an overall system of reducing invasive species transport by humans.

Key words: Phytophthora ramorum, invasive species, mountain bikes

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