

When You Have Seen One Redwood You Have Not Seen Them All¹

Rosemary Leen

Division of Biological Control, University of California, 1050 San Pablo Avenue, Albany, CA 95706 USA

Abstract

While Governor of California, Ronald Reagan made the statement, "when you've seen one redwood, you've seen them all". Weeds are rarely collected by the average professional botanist. Persons surveying weed populations may examine and identify only a small number of individuals and assume that these individuals are representative of the entire population. This attitude may create many misconceptions about the success or failure of a biological control program. In the case of *Cytisus scoparius*, Scotch broom, and other broom species, misidentifications of collected specimens and failure to continue to survey for Scotch broom has resulted in the misrepresentation of the broom problem. Many of the plants identified as *C. scoparius* are in fact *C. striatus*, what I refer to as "Portuguese" broom although *C. multiflorus* is also known as Portuguese broom. The presence of *C. striatus* in California was initially recognized in 1985 although this species was collected and misidentified as early as 1978. These two species are easily distinguished by their seed pods or twig angles. Pods of *C. striatus* are inflated and very hairy all over and twigs are 8- or 10-angled. Pods of *C. scoparius* are flat and hairy only along the edges and twigs are usually 5-angled. These are characteristics that should lead any biologist to question the identify of the specimens they are studying. The total acreage covered by *C. scoparius* in California in 1966 was 75,435. Present estimates of total acreage covered by *C. striatus* is approximately 50.5. Of the eight counties where *C. striatus* was collected in 1965 or 1966, in only three (Contra Costa, Marin and San Mateo) was Scotch broom thought to occur and in only two (Marin and San Mateo) was the acreage covered estimated. Of the plants previously identified as Scotch broom in San Mateo County, all were "Portuguese" broom. The problem becomes more confounding where populations contain both Scotch and "Portuguese" broom (e.g., Contra Costa County). In addition, acreage covered by of French broom, *Telone monspessulana*, is also overrated since the species attributable to the problem include *T. x racemosa* and hybrids of *T. x racemosa* and *T. monspessulana*. Assuming the attitude, "when you have seen one redwood, you have seen them all", is clearly inappropriate for a biological control of weeds program. Clearly, in the case of broom, "when you have seen one broom, you have not seen them all". Weed specialists and other botanists should be encouraged to collect and identify weedy plants no matter how common the weeds may appear to be. Once a closer look has been taken, as with the brooms, the pest species and subsequently the target species will be accurately identified.