

# CREEPING FIELD CRESS (*Rorippa sylvestris*)

*A new weed in container and field grown ornamentals  
in California*



*by Clyde L. Elmore*

Extension Weed Specialist  
University of California, Davis  
California



New shoots from section of rhizome

The weed, creeping field cress (*Rorippa sylvestris* (L.) Besser) has been in the United State since about 1818 as an introduction from Europe. It has become more common in ornamental plantings over the years and has spread widely since introduction, probably through repeated introductions. It has been commonly found along stream edges and other wet areas but is a real concern because we are finding vegetative material (rhizomes) of the weed being shipped interstate with vegetatively propagated herbaceous ornamentals.

**Locations found or present:**

Creeping field cress is a perennial member of the Brassicaceae family (mustard) and is one of the three perennials in the genus. This mustard has been located in Oregon, Washington, Idaho and Montana in the northwestern U.S. however sites have been located as far south as Texas, Alabama and Mississippi as of 1966. It is also found in nurseries in eastern Canada, but has been recorded in all of the southern provinces. Most recently it has been found in two locations in California.

A second species *R. palustris* is also found in California. This species has also been confused with *R. slandica*. This species can be found in wet areas below 2000 feet elevation and in irrigated shade houses.



New shoots growing from rhizomes in a container

### **Plant characteristics:**

Creeping field cress seems to set seed sparingly, but spreads rapidly from rhizomes with many buds. Leaves are finely divided and resemble a watercress leaf from which it is closely related. It has a small yellow flower and flower stalks appear to be 6 to 12 inches in height. It has a shallow rhizome that rapidly initiates new shoot or a deep rhizome that has been found to 36 inches. Plant material can be propagated many ways. It has been reported to be able to grow roots from leaves floating on a water surface. It has propagated from 1.5 to 3 cm rhizome pieces routinely when planted from material harvested outside and planted in the greenhouse. Many new plants can be produced from rhizome pieces or from the growing plant. After 6 weeks of growth in the greenhouse, hundreds of new plants may be produced. Shoot explants have also been very successful. Shoots emerge from 2 to 4 cm depths in 3 to 4 days.

The second species in California (*R. posts*) is considered to be an annual, biennial or weak perennial. It is usually found as an erect plant with a single dominant stem from the base of the plant. The leaves (5- 20 cm long) with *R. sylvestris* in tie wild. This plant looks more robust (up to 80 cm in height) than *R. sylvestris*.

### **Post emergence control:**

In a report from England, field cress was controlled with triclopyr (Garlon, Turflon) when established from rhizome pieces in pots, in the field, at rates of 1 to 3 pounds per acre. Clopyralid (Stinger) was not effective at rates of 0.12 to 0.5 pounds per acre. Glyphosate (Roundup) was effective in killing the top growth, but regrowth occurred. Amitrole, fluroxypur (Starane), paraquat and MCPB did not give effective control. The post emergence herbicides 2,4-D, triclopyr, clopyralid and glyphosate were also evaluated in California. The 2,4-D or high rates of triclopyr (nonselective rates in ornamental were effective for control in California. Glyphosate controlled the top growth but did not kill the plants. The *R. palustris* seems to be easier to control and may not pose a major weed problem.

### **Preemergence control:**

In experiments at Davis, several herbicides have evaluated, including metolachlor (Pennant), trifluralin (Treflan), oryzalin (Surflan), oxyfluorfen (Goal), oxyfluorfen plus oryzalin (Rout), isoxaben (Gallery), and isoxaben plus oryzalin (Snapshot). Also a polypropylene fabric (Typar) or fabric plus trifluralin (Biobarrier) placed over the rhizome segment at planting was evaluated. In California tests, trifluralin, oryzalin and isoxaben suppresses the top growth by inhibiting new shoots and roots, however the rhizome piece remained alive and would regrow when the herbicide degraded.

**NOTE FROM UGROW: DO NOT, UNDER ANY CIRCUMSTANCES, USE ANY OF THE CHEMICALS LISTED ABOVE TO TRY TO CONTROL THIS WEED. DOING SO**

**WILL RESULT IN IMMEDIATE LOSS OF GARDEN PRIVILEGES AND RESULT IN FORFEITURE OF YOUR PLOT(S). NONE OF THE CHEMICALS LISTED ABOVE ARE APPROVED FOR USE IN ORGANIC GARDENING. THEY ARE ALL HIGHLY POTENT, TOXIC CHEMICALS AND HAVE NO PLACE IN FOOD PRODUCTION GARDENS, OR ANY GARDEN FOR THAT MATTER.**

**Other control methods:**

No other control method has been reported to be effective. Cultivation is likely to make the problem more severe, because chopping the rhizome into fine pieces will propagate new plants. Neither steaming nor methyl bromide has been effective for eradication, since the rhizome has been found at depths below 3 feet in the field.

**Concerns:**

Creeping field cress has the potential to become a serious weed in greenhouse, container and field ornamentals. It has a great potential to spread in our state. It has been confirmed in container and greenhouse crops in California in 1998. With adequate water, fertility and having the capability to spread by rhizomes with ornamental plant material, it is important to be alert for this weed and not allow it to be planted in the nursery stock plant or sold to unsuspecting homeowners. There seems to be no selective control in ornamentals. State and county agricultural inspectors and university extension staff should be looking for this plant. Fine, white rhizome pieces are found as part of a root mass, bulb or tuber. The ornamental plant material should be cleaned before shipping, or destroyed so the rhizomes will not spread the plant to new locations.



Plant grown in container for 6 weeks from about 2 in. rhizome, showing new shoots and rhizome growth. The original rhizome piece is labeled.

*Graphic Design by Bin Yang*