**Quackgrass** *Elymus repens* (L.) Gould

**Synonyms:** *Agropyron repens* (L.) Beauv.; *Agropyron repens* var. subulatum (Schreb.) Roemer & J.A. Schultes; *Elytrigia repens* (L.) Desv. ex B.D. Jackson; *Elytrigia repens* var. vaillantiana (Wulfen & Schreb.) Prokudin; *Elytrigia vaillantiana* (Wulfen & Schreb.) Beetle; *Triticum repens* L.; *Triticum vaillantianum* Wulfen & Schreb.

**Common Names:** Quackgrass, couch grass, dog grass, quickgrass, scutch, quitch, twitch, creeping quackgrass, scotch, creeping wild rye

**Native Origin:** Europe, northern Africa, and temperate Asia to India; introduced to the United States as a contaminant in hay or straw.

**Description:** A cool-season, perennial grass (Family: Poaceae) that grows 2 feet or more laterally from the main shoot before sending aerial stems, and can grow as deep as 8 inches. Leaf blades are ¼ to ½ inch wide, flat, pointed, and have small auricles at the junction of blade and sheath. Leaf blades are sparsely hairy above and hairless below. Spikelets are arranged in two long rows and born flat-wise to the stem. The florets are awnless to short-awned. Seeds are elliptical, pale yellow to brown. Each stem can produce up to 400 seeds, although 20 to 40 is common. Seeds may remain dormant in the soil for 2 to 3 years. The rhizomes are long and highly branched, yellowish-white, sharp-pointed, and somewhat fleshy. *E. repens* can be distinguished from many other grasses by its prominent pale yellow or straw-colored rhizomes with a tough brownish sheath at each joint. The sheathed joints give the rhizomes a scaly appearance. It reproduces by seed and extensively creeping rhizomes.

**Habitat:** It is found in a variety of grassland communities such as open disturbed areas, riverbanks, fields, pastures, waste areas, mixed-grass prairies and open woodlands. It is early successional, and can invade gardens, yards, crop fields, roadsides, ditches, and other disturbed, moist areas. It tolerates a variety of soil types, including saline conditions, but grows most vigorously in soils of pH 6.5-8.0. It is drought and salt tolerant.

**Distribution:** This species is reported from states shaded on Plants Database map. It is reported invasive in AZ, CO, ID, MD, MI, OH, OR, SD, VA, WA, WI, and WY.

**Ecological Impacts:** It invades wet meadows, wetland borders and other low-lying wet areas of grasslands and prairies. It forms extensive rhizomes that enable it to compete strongly with cultivated crops, native grasses and forbs in prairies and grasslands. Additionally, it reduces the availability of soil moisture and limits nutrients.

**Control and Management:**
- **Manual** - Till in spring and fall if possible; use control burns with approved burn plan
- **Chemical** - It can be effectively controlled using any of several readily available general use herbicides such as glyphosate in the spring or fall. Follow label and state requirements.

**References:**
- [http://plants.usda.gov](http://plants.usda.gov), [www.invasive.org](http://www.invasive.org), [http://tnceweeds.ucdavis.edu/eadocs/documnts/elytrep.html](http://tnceweeds.ucdavis.edu/eadocs/documnts/elytrep.html), [http://akweeds.uaa.alaska.edu/pdfs/species_bios_pdfs/Species_bios_ELRE.pdf](http://akweeds.uaa.alaska.edu/pdfs/species_bios_pdfs/Species_bios_ELRE.pdf)
- [www.invasivespeciesinfo.gov/profiles/quackgrass.shtml](http://www.invasivespeciesinfo.gov/profiles/quackgrass.shtml)
- [www.nps.gov/plants/alien/map/elre1.htm](http://www.nps.gov/plants/alien/map/elre1.htm)
- Czarapata, Elizabeth, Invasive Plants of the Upper Midwest, An Illustrated Guide to their Identification and Control, 2005, p. 117-118

Produced by the USDA Forest Service, Forest Health Staff, Newtown Square, PA. Invasive Plants website: [http://www.na.fs.fed.us/fhp/invasive_plants](http://www.na.fs.fed.us/fhp/invasive_plants)