WRITTEN FINDINGS OF THE WASHINGTON STATE NOXIOUS WEED CONTROL BOARD

Scientific Name: Carduus pycnocephalus L.

<u>Common Name</u>: Italian thistle

Family: Compositae

Legal Status: Class A

<u>Description and Variation</u>: Italian thistle is a winter annual broadleaf weed that is similar in appearance to slenderflower thistle, *C. tenuiflorus*. Plants grow up to 6 feet tall with spiny-winged stems. Leaves are oblanceolate to lanceolate to 15 cm long and 8 cm wide. Leaves are pinnately divided into spiny-toothed or lobed segments, the terminal spine of the segments and lobes the most prominent and rigid. The underside of leaves and stems are covered with cobwebby hairs. About 1-5 pinkish, cylindrical flower heads are born in terminal clusters. The number is distinctly fewer than *C. tenuiflorus*. Each flower head is up to 2 cm in length and bracts are hairy as in *C. pycnocephalus*.

<u>Economic Importance</u>: Italian thistle has no known beneficial economic value, but it has invaded range and pastures. On grazed lands, slenderflower thistle like other thistles can reduce productivity by physically interfering with grazing and by displacing desired grasses. Native vegetation is threatened by this aggressive weed that tends to form dense stands.

<u>Geographical Distribution</u>: Italian thistle was reported from Steptoe Canyon in Whitman County. It is also found in Oregon as well as in Clearwater and Idaho Counties of Idaho. Many established populations exist in California, particularly coastal counties. Its native range is western and southern Europe.

Habitat: Dry, open area such as pastures, range, and right-of-ways, also waste areas.

History: First reported in Whitman County 1991.

<u>Growth and Development</u>: Typically, it germinates in the fall, overwinters as a rosette and flowers in late spring. Seed has no after-ripening requirement and germinates over temperatures ranging from 2 to 30 C.

Reproduction: Seed only.

<u>Response to Herbicides</u>: MCPA is recommended for application during the seedling or rosette stage. Applications after rosettes are larger that 6 inches in diameter may be less effective. Other growth regulator type herbicides (2,4-D, dicamba, or picloram) and Roundup may be effective, but references are not available to substantiate.

<u>Response to Cultural Methods</u>: As an annual broadleaf, mechanical control such as tilling or digging will kill Italian thistle. Deferring autumn grazing of sheep has been effective in reducing stand density because the thistles grow etiolated and less spiny when competing with ungrazed grasses. Then sheep will graze the thistle along with the grass.

<u>Biocontrol Potentials</u>: Two fungi have been evaluated as agents on Italian thistle. An *Alternaria* sp., which killed *C. pycnocephalus* in the cotyledon stage, was also pathogenic to slenderflower thistle. A *Puccinia* sp., isolated and active on *C. pycnocephalus*, was not active on slenderflower thistle. A biotype of *Rhinocyllus conicus*, a bioagent commonly used for the control of musk thistle, established readily on Italian thistle in California.

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*References available from the Washington State Noxious Weed Control Board office in Kent

Justification for Inclusion on the Washington State Noxious Weed List:

Italian thistle is exceptionally closely related and similar to slenderflower thistle. Justification for the inclusion of each of these weedy thistles is similar. Italian thistle is an aggressive exotic thistle that currently is recorded in Washington only from Steptoe Canyon in Whitman County, Washington. This plant has been introduced into other countries and states, where it has established, shown its aggressive nature, and become a problem weed in pastures and rangeland. Targeting this weed for eradication will protect Washington's range and natural resources from infestation, damage and costly control.