

WEED RISK ASSESSMENT FORM

Botanical name:	<i>Tripleurospermum perforata</i> (Merat) M. Lainz		
Common name:	scentless false mayweed, scentless chamomile		
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Outcome score:

A. Climatic Comparison		
This species is present or may potentially establish in the following eco-geographic regions:		
1 South Coastal	Yes	
2 Interior-Boreal	Yes	
3 Arctic-Alpine	Yes	

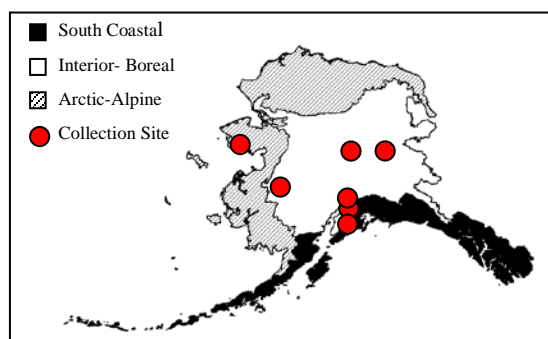
B.	Invasiveness Ranking	Total (Total Answered*) Possible	Total
1	Ecological impact	40 (40)	13
2	Biological characteristic and dispersal ability	25 (23)	13
3	Ecological amplitude and distribution	25 (25)	15
4	Feasibility of control	10 (10)	6
	Outcome score	100 (98) ^b	47 ^a
	Relative maximum score†		0.48

* For questions answered "unknown" do not include point value for the question in parentheses for "Total Answered Points Possible."

† Calculated as ^a/_b.

A. CLIMATIC COMPARISON:

	1.1 Has this species ever been collected or documented in Alaska?
Yes	Yes – continue to 1.2
	No – continue to 2.1
	1.2. Which eco-geographic region has it been collected or documented (see inset map)? <i>Proceed to Section B. Invasiveness Ranking.</i>
Yes	South Coastal
Yes	Interior-Boreal
Yes	Arctic-Alpine



Documentation: Scentless false mayweed has been collected in South Coastal, Interior-Boreal, and Arctic-Alpine eco-geographic regions of Alaska (AK Weed Database 2004, UAM 2004).
 Sources of information:
 AK Weeds Database. 2004. Database of exotic vegetation collected in Alaska. University of Alaska, Alaska Natural Heritage Program – US Forest Service – National Park Service Database. University of Alaska Museum. University of Alaska Fairbanks. 2004.
<http://hispidamuseum.uaf.edu:8080/home.cfm>

- 2.1. Is there a 40% or higher similarity (based on CLIMEX climate matching) between climates any where the species currently occurs and
- a. Juneau (South Coastal Region)?
 - Yes – record locations and similarity; proceed to Section B.
 Invasiveness Ranking
 - No
 - b. Fairbanks (Interior-Boreal)?
 - Yes – record locations and similarity; proceed to Section B.
 Invasiveness Ranking
 - No
 - c. Nome (Arctic-Alpine)?
 - Yes – record locations and similarity; proceed to Section B.
 Invasiveness Ranking
 - No
 - If “No” is answered for all regions, reject species from consideration

Documentation:
 Sources of information:

B. INVASIVENESS RANKING

1. ECOLOGICAL IMPACT

1.1. Impact on Natural Ecosystem Processes

- A. No perceivable impact on ecosystem processes 0
- B. Influences ecosystem processes to a minor degree (e.g., has a perceivable but mild influence on soil nutrient availability) 3
- C. Significant alteration of ecosystem processes (e.g., increases sedimentation rates along streams or coastlines, reduces open water that are important to waterfowl) 7
- D. Major, possibly irreversible, alteration or disruption of ecosystem processes (e.g., the species alters geomorphology; hydrology; or affects fire frequency, altering community composition; species fixes substantial levels of nitrogen in the soil making soil unlikely to support certain native plants or more likely to favor non-native species) 10
- U. Unknown

Score 3

Documentation:
 Identify ecosystem processes impacted:
 Scentless false mayweed reduces soil moisture and nutrients for other species. It likely causes retardation of successional establishment of native species (NAPPO 2003).
 Rational:

Sources of information:
 NAPPO – North American Plant Protection Organization. 2003. Pest fact sheet, *Matricaria inodora* L. *Tripleurospermim perforata* (Merat) M. Lainz. Available: <http://www.nappo.org/> [June 2003].

1.2. Impact on Natural Community Structure

- A. No perceived impact; establishes in an existing layer without influencing its structure 0
- B. Influences structure in one layer (e.g., changes the density of one layer) 3
- C. Significant impact in at least one layer (e.g., creation of a new layer or elimination of an existing layer) 7

- D. Major alteration of structure (e.g., covers canopy, eradicating most or all layers below) 10
- U. Unknown

Score 3

Documentation:

Identify type of impact or alteration:

Dense stands of scentless false mayweed in prairies have been reported (CWMA 2000, NAPPO 2003, Parchoma 2004). This plant has not been observed in dense stands in Alaska, but it does increase the density of the early successional herbaceous layer (I. Lapina – pers. obs.).

Rational:

Sources of information:

Lapina, I. Botanist, Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, Alaska. Tel: (907) 257-2710 – Pers. obs.

NAPPO – North American Plant Protection Organization. 2003. Pest fact sheet, *Matricaria inodora* L. *Tripleurospermim perforata* (Merat) M. Lainz. Available: <http://www.nappo.org/> [June 2003].

1.3. Impact on Natural Community Composition

- A. No perceived impact; causes no apparent change in native populations 0
- B. Influences community composition (e.g., reduces the number of individuals in one or more native species in the community) 3
- C. Significantly alters community composition (e.g., produces a significant reduction in the population size of one or more native species in the community) 7
- D. Causes major alteration in community composition (e.g., results in the extirpation of one or several native species, reducing biodiversity or change the community composition towards species exotic to the natural community) 10
- U. Unknown

Score 3

Documentation:

Identify type of impact or alteration:

Spring-emergent seedlings can form very dense stands, reducing the growth of seedlings of other species (NAPPO 2003).

Rational:

Sources of information:

NAPPO – North American Plant Protection Organization. 2003. Pest fact sheet, *Matricaria inodora* L. *Tripleurospermim perforata* (Merat) M. Lainz. Available: <http://www.nappo.org/> [June 2003].

1.4. Impact on higher trophic levels (cumulative impact of this species on the animals, fungi, microbes, and other organisms in the community it invades)

- A. Negligible perceived impact 0
- B. Minor alteration 3
- C. Moderate alteration (minor reduction in nesting/foraging sites, reduction in habitat connectivity, interference with native pollinators, injurious components such as spines, toxins) 7
- D. Severe alteration of higher trophic populations (extirpation or endangerment of an existing native species/population, or significant reduction in nesting or foraging sites) 10
- U. Unknown

Score 4

Documentation:

Identify type of impact or alteration:

Scentless false mayweed is unpalatable to animals and can form dense stands in pastures and hayfields, thus altering the quantity of foraging sites (CWMA 2000, Parchoma 2004). The flowers attract bees and flies (Harris and McClay 2003) and may alter the pollination ecology of native communities.

Rational:

Sources of information:

CWMA - Colorado Weed Management Association. 2000. Noxious weeds and non-native plants: Scentless chamomile (*Matricaria perforata*). Available: http://www.cwma.org/scentless_chimomile.html [October 12, 2004].

Harris, P. and A. McClay. 2003. Scentless chamomile. *Tripleurospermum inodorum* (L.) Sch. Bip. In: Classical biological control of weeds. Biology of target weeds. Available: http://res2.agr.ca/lethbridge/weedbio/plant/bchamom_e.htm [October 12, 2004].

Parchoma G. 2004. Scentless chamomile. *Matricatia perforata* Merat. In: Guide to Weeds in British Columbia. Ministry of Agriculture, Food and Fisheries. Open Learning Agency. Available: <http://www.weedsbc.ca/index.html>.

Total Possible	40
Total	13

2. BIOLOGICAL CHARACTERISTICS AND DISPERSAL ABILITY

2.1. Mode of reproduction

- A. Not aggressive reproduction (few [0-10] seeds per plant and no vegetative reproduction) 0
- B. Somewhat aggressive (reproduces only by seeds (11-1,000/m²) 1
- C. Moderately aggressive (reproduces vegetatively and/or by a moderate amount of seed, <1,000/m²) 2
- D. Highly aggressive reproduction (extensive vegetative spread and/or many seeded, >1,000/m²) 3
- U. Unknown

Score	3
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Documentation:

Describe key reproductive characteristics (including seeds per plant):

Scentless false mayweed reproduces entirely by copious amounts of seed. A single plant can produce up to a million seeds, with dense stands capable of producing 1,800,000 seeds per square meter (Harris and McClay 2003, Juras et al. 2004, NAPPO 2003, Parchoma 2004).

Rational:

Sources of information:

Harris, P. and A. McClay. 2003. Scentless chamomile. *Tripleurospermum inodorum* (L.) Sch. Bip. In: Classical biological control of weeds. Biology of target weeds. Available: http://res2.agr.ca/lethbridge/weedbio/plant/bchamom_e.htm [October 12, 2004].

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

NAPPO – North American Plant Protection Organization. 2003. Pest fact sheet, *Matricaria inodora* L. *Tripleurospermim perforata* (Merat) M. Lainz. Available: <http://www.nappo.org/> [June 2003].

Parchoma G. 2004. Scentless chamomile. *Matricatia perforata* Merat. In: Guide to Weeds in British Columbia. Ministry of Agriculture, Food and Fisheries. Open Learning Agency. Available: <http://www.weedsbc.ca/index.html>

2.2. Innate potential for long-distance dispersal (bird dispersal, sticks to animal hair, buoyant fruits, wind-dispersal)

- A. Does not occur (no long-distance dispersal mechanisms) 0
- B. Infrequent or inefficient long-distance dispersal (occurs occasionally despite lack of adaptations) 2
- C. Numerous opportunities for long-distance dispersal (species has adaptations such as pappus, hooked fruit-coats, etc.) 3
- U. Unknown

Score **2**

Documentation:

Identify dispersal mechanisms:

Seeds are dispersed by flowing water, wind, and drifting snow (Juras et al. 2004, Parchoma 2004). Up to 26% of seeds remained viable in dung (NAPPO 2003, Rutledge and McLendon 1996). However, the species lacks morphological adaptations for long-distance dispersal.

Rational:

There is no pappus on achenes.

Sources of information:

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

NAPPO – North American Plant Protection Organization. 2003. Pest fact sheet, *Matricaria inodora* L. *Tripleurospermum perforata* (Merat) M. Lainz. Available: <http://www.nappo.org/> [June 2003].

Parchoma G. 2004. Scentless chamomile. *Matricaria perforata* Merat. In: Guide to Weeds in British Columbia. Ministry of Agriculture, Food and Fisheries. Open Learning Agency. Available: <http://www.weedsbc.ca/index.html>

Rutledge, C.R., and T. McLendon. 1996. An Assessment of Exotic Plant Species of Rocky Mountain National Park. Department of Rangeland Ecosystem Science, Colorado State University. Jamestown ND: Northern Prairie Wildlife Research Center Online.

<http://www.npwr.usgs.gov/resource/othrdata/explant/explant.htm> (Version 15DEC98).

2.3. Potential to be spread by human activities (both directly and indirectly – possible mechanisms include: commercial sales, use as forage/revegetation, spread along highways, transport on boats, contamination, etc.)

- | | |
|---|---|
| A. Does not occur | 0 |
| B. Low (human dispersal is infrequent or inefficient) | 1 |
| C. Moderate (human dispersal occurs) | 2 |
| D. High (there are numerous opportunities for dispersal to new areas) | 3 |
| U. Unknown | |

Score **3**

Documentation:

Identify dispersal mechanisms:

Seeds are easily dispersed by vehicles and as a contaminant in crop seed and hay (Juras et al. 2004, Parchoma 2004).

Rational:

Sources of information:

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

Parchoma G. 2004. Scentless chamomile. *Matricaria perforata* Merat. In: Guide to Weeds in British Columbia. Ministry of Agriculture, Food and Fisheries. Open Learning Agency. Available: <http://www.weedsbc.ca/index.html>

2.4. Allelopathic

- | | |
|------------|---|
| A. No | 0 |
| B. Yes | 2 |
| U. Unknown | |

Score **U**

Documentation:

Describe effect on adjacent plants:

Unknown

Rational:

Sources of information:

2.5. Competitive ability

- A. Poor competitor for limiting factors 0
- B. Moderately competitive for limiting factors 1
- C. Highly competitive for limiting factors and/or nitrogen fixing ability 3
- U. Unknown

Score

Documentation:

Evidence of competitive ability:

Scentless false mayweed readily establishes on disturbed sites, but cannot compete with later successional forbs and grasses (Harris and McClay 2003).

Rational:

Sources of information:

Harris, P. and A. McClay. 2003. Scentless chamomile. *Tripleurospermum inodorum* (L.) Sch. Bip. In: Classical biological control of weeds. Biology of target weeds. Available: http://res2.agr.ca/lethbridge/weedbio/plant/bchamom_e.htm [October 12, 2004].

2.6. Forms dense thickets, climbing or smothering growth habit, or otherwise taller than the surrounding vegetation

- A. No 0
- B. Forms dense thickets 1
- C. Has climbing or smothering growth habit, or otherwise taller than the surrounding vegetation 2
- U. Unknown

Score

Documentation:

Describe grow form:

Densities of 40 plants on square meter are common on crop fields in Canada (Harris and McClay 2003). It is not observed creating dense thickets in Alaska (I. Lapina – pers. obs.).

Rational:

Sources of information:

Harris, P. and A. McClay. 2003. Scentless chamomile. *Tripleurospermum inodorum* (L.) Sch. Bip. In: Classical biological control of weeds. Biology of target weeds. Available: http://res2.agr.ca/lethbridge/weedbio/plant/bchamom_e.htm [October 12, 2004].

Lapina, I., Botanist, Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, Alaska. Tel: (907) 257-2710 – Pers. obs.

2.7. Germination requirements

- A. Requires open soil and disturbance to germinate 0
- B. Can germinate in vegetated areas but in a narrow range or in special conditions 2
- C. Can germinate in existing vegetation in a wide range of conditions 3
- U. Unknown

Score

Documentation:

Describe germination requirements:

Seeds are able to germinate under a wide range of temperature and moisture conditions. Germination is better under the canopy than on open, barren soil (Juras et al. 2004).

Rational:

Sources of information:

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

2.8. Other species in the genus invasive in Alaska or elsewhere

- A. No 0
- B. Yes 3
- U. Unknown

Score

Documentation:

Species:

None

Sources of information:

2.9. Aquatic, wetland, or riparian species

- A. Not invasive in wetland communities 0
- B. Invasive in riparian communities 1
- C. Invasive in wetland communities 3
- U. Unknown

Score

Documentation:

Describe type of habitat:

Scentless false mayweed is found along irrigation ditches, shorelines, streams and pond edges, as well as roadsides, perennial forage crops, pastures, lawns, gardens, waste areas (Gubanov et al. 1995, Juras et al. 2004, Parchoma 2004).

Rational:

Sources of information:

Gubanov, I.A., K.B. Kiseleva, B.C. Novikov and B.N. Tihomirov. 1995. Flora of vascular plants of Center European Russia. Moscow. Argus. 558 pp.

Juras, L., E. Johnson and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

Parchoma G. 2004. Scentless chamomile. *Matricatia perforata* Merat. In: Guide to Weeds in British Columbia. Ministry of Agriculture, Food and Fisheries. Open Learning Agency. Available: <http://www.weedsbc.ca/index.html>

Total Possible

Total

3. DISTRIBUTION

3.1. Is the species highly domesticated or a weed of agriculture

- A. No 0
- B. Is occasionally an agricultural pest 2
- C. Has been grown deliberately, bred, or is known as a significant agricultural pest 4
- U. Unknown

Score

Documentation:

Identify reason for selection, or evidence of weedy history:

Scentless false mayweed is a one of the major weeds in wheat, lentil, mustard, and flax agriculture (Juras et al. 2004, Royer and Dickinson 1999, Parchoma 2004).

Rational:

Sources of information:

Juras, L., E. Johnson and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

Royer, F. and R. Dickinson. 1999. Weeds of the Northern U.S. and Canada. The University of Alberta press. 434 pp.
 Parchoma G. 2004. Scentless chamomile. *Matricaria perforata* Merat. In: Guide to Weeds in British Columbia. Ministry of Agriculture, Food and Fisheries. Open Learning Agency. Available: <http://www.weedsbc.ca/index.html>

3.2. Known level of impact in natural areas

- A. Not known to cause impact in any other natural area 0
- B. Known to cause impacts in natural areas, but in dissimilar habitats and climate zones than exist in regions of Alaska 1
- C. Known to cause low impact in natural areas in similar habitats and climate zones to those present in Alaska 3
- D. Known to cause moderate impact in natural areas in similar habitat and climate zones 4
- E. Known to cause high impact in natural areas in similar habitat and climate zones 6
- U. Unknown

Score

Documentation:

Identify type of habitat and states or provinces where it occurs:

Scentless false mayweed is not appearing to have perceivable impact on natural plant communities (Rutledge and McLendon 1996).

Sources of information:

Rutledge, C.R. and T. McLendon. 1996. An Assessment of Exotic Plant Species of Rocky Mountain National Park. Department of Rangeland Ecosystem Science, Colorado State University. Jamestown ND: Northern Prairie Wildlife Research Center Online.
<http://www.npwrc.usgs.gov/resource/othrdata/explant/explant.htm> (Version 15DEC98).

3.3. Role of anthropogenic and natural disturbance in establishment

- A. Requires anthropogenic disturbances to establish 0
- B. May occasionally establish in undisturbed areas but can readily establish in areas with natural disturbances 3
- C. Can establish independent of any known natural or anthropogenic disturbances 5
- U. Unknown

Score

Documentation:

Identify type of disturbance:

Scentless false mayweed is often associated with disturbed habitats where there is little competition from established vegetation. Periodic disturbance by cultivation, livestock trampling, or flooding promote establishment (Juras et al. 2004). In Russia it is often associated with natural erosion along streambanks (I. Lapina – pers. obs.)

Rational:

Sources of information:

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].
 Lapina, I., Botanist, Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, Alaska. Tel: (907) 257-2710 – Pers. obs.

3.4. Current global distribution

- A. Occurs in one or two continents or regions (e.g., Mediterranean region) 0
- B. Extends over three or more continents 3
- C. Extends over three or more continents, including successful introductions in arctic or subarctic regions 5
- U. Unknown

Score

Documentation:

Describe distribution:

Scentless false mayweed is native to northern and central Europe. It is introduced into

North America and Asia. (Juras et al. 2004, NAPPO 2003).

Rational:

Sources of information:

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

NAPPO – North American Plant Protection Organization. 2003. Pest fact sheet, *Matricaria inodora* L. *Tripleurospermum perforata* (Merat) M. Lainz. Available: <http://www.nappo.org/> [June 2003].

3.5. Extent of the species U.S. range and/or occurrence of formal state or provincial listing

- | | | |
|----|--|---|
| A. | 0-5% of the states | 0 |
| B. | 6-20% of the states | 2 |
| C. | 21-50%, and/or state listed as a problem weed (e.g., “Noxious,” or “Invasive”) in 1 state or Canadian province | 4 |
| D. | Greater than 50%, and/or identified as “Noxious” in 2 or more states or Canadian provinces | 5 |
| U. | Unknown | |

Score

5

Documentation:

Identify states invaded:

Scentless false mayweed present in 26 northern states of the United States and in all Canadian provinces (Juras et al. 2004, NAPPO 2003, USDA 2002). It is listed as noxious in Washington and Saskatchewan (Invader Database System 2003). It is considered a weed in Alberta, British Columbia, Manitoba, and Quebec (Royer and Dickinson 1999).

Rational:

Sources of information:

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

Invaders Database System. The University of Montana. 2003. Montana Noxious Weed Trust Fund. Department of Agriculture. <http://invader.dbs.umt.edu/>

NAPPO – North American Plant Protection Organization. 2003. Pest fact sheet, *Matricaria inodora* L. *Tripleurospermum perforata* (Merat) M. Lainz. Available: <http://www.nappo.org/> [June 2003].

Royer, F., and R. Dickinson. 1999. Weeds of the Northern U.S. and Canada. The University of Alberta press. 434 pp.

USDA (United States Department of Agriculture), NRCS (Natural Resource Conservation Service). 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Total Possible

25

Total

15

4. FEASIBILITY OF CONTROL

4.1. Seed banks

- | | | |
|----|---|---|
| A. | Seeds remain viable in the soil for less than 3 years | 0 |
| B. | Seeds remain viable in the soil for between 3 and 5 years | 2 |
| C. | Seeds remain viable in the soil for 5 years and more | 3 |
| U. | Unknown | |

Score

3

Documentation:

Identify longevity of seed bank:

Seeds remain viable in the soil for 10 - 15 years (Harris and McClay 2003, Juras et al.

2004, Rutledge and McLendon 1996).

Rational:

Sources of information:

Harris, P. and A. McClay. 2003. Scentless chamomile. *Tripleurospermum inodorum* (L.) Sch. Bip. In: Classical biological control of weeds. Biology of target weeds. Available: http://res2.agr.ca/lethbridge/weedbio/plant/bchamom_e.htm [October 12, 2004].

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

Rutledge, C.R., and T. McLendon. 1996. An Assessment of Exotic Plant Species of Rocky Mountain National Park. Department of Rangeland Ecosystem Science, Colorado State University. Jamestown ND: Northern Prairie Wildlife Research Center Online. <http://www.npwr.usgs.gov/resource/othrdata/explant/explant.htm> (Version 15DEC98).

4.2. Vegetative regeneration

- | | | |
|----|--|---|
| A. | No resprouting following removal of aboveground growth | 0 |
| B. | Resprouting from ground-level meristems | 1 |
| C. | Resprouting from extensive underground system | 2 |
| D. | Any plant part is a viable propagule | 3 |
| U. | Unknown | |

Score

1

Documentation:

Describe vegetative response:

Scentless false mayweed is reported to survive after removal aboveground growth (Juras et al. 2004).

Rational:

Sources of information:

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

4.3. Level of effort required

- | | | |
|----|--|---|
| A. | Management is not required (e.g., species does not persist without repeated anthropogenic disturbance) | 0 |
| B. | Management is relatively easy and inexpensive; requires a minor investment in human and financial resources | 2 |
| C. | Management requires a major short-term investment of human and financial resources, or a moderate long-term investment | 3 |
| D. | Management requires a major, long-term investment of human and financial resources | 4 |
| U. | Unknown | |

Score

2

Documentation:

Identify types of control methods and time-term required:

Scentless false mayweed tends to occupy recently disturbed sites and it does not persist without continued disturbance, thus control is seldom necessary (Harris and McClay 2003). However, multiple weeding treatments across years may be necessary to eliminate plants germinating from buried seeds. A combination of mowing, tillage, and hand-weeding can be used for prevent introduction to new areas. This species tolerates many common herbicides. Biological agents have been released in British Columbia to control this species (Juras et al. 2004, Parchoma 2004).

Rational:

Sources of information:

Harris, P. and A. McClay. 2003. Scentless chamomile. *Tripleurospermum inodorum*

(L.) Sch. Bip. In: Classical biological control of weeds. Biology of target weeds. Available: http://res2.agr.ca/lethbridge/weedbio/plant/bchamom_e.htm [October 12, 2004].

Juras, L., E. Johnson, and R. Holm. 2004. Scentless chamomile. Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan, Canada. Available: <http://www.agr.gov.sk.ca/default.asp> [October 12, 2004].

Parchoma G. 2004. Scentless chamomile. *Matricaria perforata* Merat. In: Guide to Weeds in British Columbia. Ministry of Agriculture, Food and Fisheries. Open Learning Agency. Available: <http://www.weedsbc.ca/index.html>

Total Possible	10
Total	6

Total for 4 sections Possible	98
Total for 4 sections	47

References:

- AK Weeds Database. 2004. Database of exotic vegetation collected in Alaska. University of Alaska, Alaska Natural Heritage Program – US Forest Service – National Park Service Database.
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