# **TAXON**: Pseudognaphalium attenuatum (DC.) Anderb.

SCORE: 7.0

RATING: High Risk

Taxon: Pseudognaphalium attenuatum (DC.) Anderb. Family: Asteraceae

Common Name(s): tapered cudweed Synonym(s): Gnaphalium attenuatum DC.

Assessor: Chuck Chimera Status: In Progress End Date:

WRA Score: 7.0 Designation: H(HPWRA) Rating: High Risk

Keywords: Annual, Naturalized, Weedy, Taproot, Wind-Dispersed

Qsn#	Question	Answer Option	Answer
101	Is the species highly domesticated?	y = -3, n = 0	n
102	Has the species become naturalized where grown?		
103	Does the species have weedy races?		
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	0 = low, 1 = intermediate, 2 = high (see Appendix 2)	High
202	Quality of climate match data	0 = low, 1 = intermediate, 2 = high (see Appendix 2)	High
203	Broad climate suitability (environmental versatility)	y = 1, n = 0	у
204	Native or naturalized in regions with tropical or subtropical climates	y = 1, n = 0	у
205	Does the species have a history of repeated introductions outside its natural range?	y= -2, ? = -1, n = 0	n
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n = question 205	у
302	Garden/amenity/disturbance weed	y = 1*multiplier (see Appendix 2), n = 0	n
303	Agricultural/forestry/horticultural weed	y = 2*multiplier (see Appendix 2), n = 0	n
304	Environmental weed	y = 2*multiplier (see Appendix 2), n = 0	n
305	Congeneric weed	y = 1*multiplier (see Appendix 2), n = 0	у
401	Produces spines, thorns or burrs	y = 1, n = 0	n
402	Allelopathic		
403	Parasitic	y = 1, n = 0	n
404	Unpalatable to grazing animals	y = 1, n = -1	у
405	Toxic to animals	y = 1, n = 0	n
406	Host for recognized pests and pathogens		
407	Causes allergies or is otherwise toxic to humans	y = 1, n = 0	n
408	Creates a fire hazard in natural ecosystems	y = 1, n = 0	n
409	Is a shade tolerant plant at some stage of its life cycle	y = 1, n = 0	n
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y = 1, n = 0	у
411	Climbing or smothering growth habit	y = 1, n = 0	n

Qsn#	Question	Answer Option	Answer
412	Forms dense thickets	y = 1, n = 0	n
501	Aquatic	y = 5, n = 0	n
502	Grass	y = 1, n = 0	n
503	Nitrogen fixing woody plant	y = 1, n = 0	n
504	Geophyte (herbaceous with underground storage organs bulbs, corms, or tubers)	y = 1, n = 0	n
601	Evidence of substantial reproductive failure in native habitat	y = 1, n = 0	n
602	Produces viable seed	y = 1, n = -1	у
603	Hybridizes naturally		
604	Self-compatible or apomictic	y = 1, n = -1	у
605	Requires specialist pollinators	y = -1, n = 0	n
606	Reproduction by vegetative fragmentation	y = 1, n = -1	n
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	1
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)		
702	Propagules dispersed intentionally by people	y = 1, n = -1	n
703	Propagules likely to disperse as a produce contaminant		
704	Propagules adapted to wind dispersal	y = 1, n = -1	у
705	Propagules water dispersed	y = 1, n = -1	n
706	Propagules bird dispersed	y = 1, n = -1	n
707	Propagules dispersed by other animals (externally)		
708	Propagules survive passage through the gut	y = 1, n = -1	n
801	Prolific seed production (>1000/m2)		
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides		
804	Tolerates, or benefits from, mutilation, cultivation, or fire		
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)		

## SCORE: 7.0

## **Supporting Data:**

Qsn#	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	[No evidence] "Pseudognaphalium attenuatum is widespread in the southern half of Mexico and through most of Central America; it also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica)."
102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. (2025). Personal Communication	NA
103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2025). Personal Communication	NA
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	High
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Pseudognaphalium attenuatum is widespread in the southern half of Mexico and through most of Central America; it also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica). Over this range, it occurs at elevations of 60-2200 meters in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests."
202	Quality of climate match data	High
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Pseudognaphalium attenuatum is widespread in the southern half of Mexico and through most of Central America; it also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica). Over this range, it occurs at elevations of 60-2200 meters in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests."
203	Broad climate suitability (environmental versatility)	у
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	[Broad elevation range] "Pseudognaphalium attenuatum is widespread in the southern half of Mexico and through most of Central America; it also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica). Over this range, it occurs at elevations of 60-2200 meters in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests."
204	Native or naturalized in regions with tropical or subtropical climates	у

Qsn#	Question	Answer
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Pseudognaphalium attenuatum is widespread in the southern half of Mexico and through most of Central America; it also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica)."
	Oppenheimer, H. L. & Pezzillo, Z. (2024). New Hawaiian plant records for 2023. Bishop Museum Occasional Papers 156: 55-70	[Naturalized on Maui and Hawaii Islands] "Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States."

205	Does the species have a history of repeated introductions outside its natural range?	n
	Source(s)	Notes
	Oppenneimer, H. L. & Pezzillo, Z. (2024). New Hawallan	[Limited evidence of introduction] "Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States."
	WRA Specialist. (2025). Personal Communication	No evidence to date

301	Naturalized beyond native range	у
	Source(s)	Notes
	Oppenheimer, H. L. & Pezzillo, Z. (2024). New Hawaiian plant records for 2023. Bishop Museum Occasional Papers 156: 55-70	[East Maui] "Pseudognaphalium attenuatum (DC.) Anderb. New island record Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States.  Material examined. MAUI: East Maui, Makawao Distr, Kanaio NAR, occasional, terrestrial, erect herbs, 622 m, 22 Dec 2015, Oppenheimer & M. Padgett H121503."
	Herbst, D.R., Staples, G.W. & Imada, C.T. (2004). New Hawaiian plant records for 2002-2003. Bishop Museum Occasional Papers 78: 3-12	[Hawaii Island] "Asteraceae Pseudognaphalium attenuatum (DC.) New state record A. Anderb. In a recent paper reporting new records of Pseudognaphalium for the United States (Nesom, 2001), a new state record was included for the Hawaiian Islands of a naturalized Mexican species. There is no duplicate of the cited voucher specimen in the Bishop Museum, so we repeat the documentation here to call it to the attention of local botanists.  Material cited. HAWAI'I: Ka'ü distr., near Kohala Blvd., makai of the Belt Rd, Kahuku, ubiquitous at 1500 ft in small sterile kïpuka, 10 Jan 1981, O. & I. Degener 35082 (GH, MO, SMU, TEX)"
	Morrison, C. (2024). Pohakuloa Training Area Invasive Plants Survey and Monitoring Specialist. Pers. Comm. 11 Mar	[PTA, Hawaii Island] "All of a sudden I am seeing quite a bit of this plant up at PTAalthough it has probably been here for some time and mistaken for ena'ena or other closely related species. I believe it is also an annual/biennial so maybe I have just not caught it at the right time. Seems like a pretty benign little plant but it caught my attention because of its' "sudden" appearance. "
	iNaturalist. (2025). Tapered Cudweed (Pseudognaphalium attenuatum). https://www.inaturalist.org/taxa/167487-Pseudognaphalium-attenuatum. [Accessed 12 Feb 2025]	Recorded from a number of locations on Hawaii Island

302	Garden/amenity/disturbance weed	n
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Qsn#	Question	Answer
	Source(s)	Notes
	Oppenheimer, H. L. & Pezzillo, Z. (2024). New Hawaiian plant records for 2023. Bishop Museum Occasional Papers 156: 55-70	[No negative impacts reported] "Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States. Material examined. MAUI: East Maui, Makawao Distr, Kanaio NAR, occasional, terrestrial, erect herbs, 622 m, 22 Dec 2015 Oppenheimer & M. Padgett H121503."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
000		
303	Agricultural/forestry/horticultural weed	n 
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	CABI. (2025). CABI Compendium Invasive Species. https://www.cabidigitallibrary.org/product/qi. [Accessed 13 Feb 2025]	No evidence
304	Environmental weed	
	Environmental weed	n
	Source(s)	n Notes
		Notes  [No negative impacts reported] "Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States. Material examined. MAUI: East Maui, Makawao Distr,
	Source(s)  Oppenheimer, H. L. & Pezzillo, Z. (2024). New Hawaiian plant records for 2023. Bishop Museum Occasional Papers 156: 55-70  Morrison, C. (2024). Pohakuloa Training Area Invasive	Notes  [No negative impacts reported] "Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States. Material examined. MAUI: East Maui, Makawao Distr, Kanaio NAR, occasional, terrestrial, erect herbs, 622 m, 22 Dec 2015 Oppenheimer & M. Padgett H121503."  [No obvious negative environmental impacts observed in PTA, Hawa Island as of March 2024] "All of a sudden I am seeing quite a bit of this plant up at PTAalthough it has probably been here for some time and mistaken for ena'ena or other closely related species. I believe it is also an annual/biennial so maybe I have just not caught it
	Source(s)  Oppenheimer, H. L. & Pezzillo, Z. (2024). New Hawaiian plant records for 2023. Bishop Museum Occasional Papers 156: 55-70  Morrison, C. (2024). Pohakuloa Training Area Invasive Plants Survey and Monitoring Specialist. Pers. Comm. 11	Notes  [No negative impacts reported] "Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States. Material examined. MAUI: East Maui, Makawao Distr, Kanaio NAR, occasional, terrestrial, erect herbs, 622 m, 22 Dec 2015 Oppenheimer & M. Padgett H121503."  [No obvious negative environmental impacts observed in PTA, Hawa Island as of March 2024] "All of a sudden I am seeing quite a bit of this plant up at PTAalthough it has probably been here for some time and mistaken for ena'ena or other closely related species. I believe it is also an annual/biennial so maybe I have just not caught it at the right time. Seems like a pretty benign little plant but it caught m
	Source(s)  Oppenheimer, H. L. & Pezzillo, Z. (2024). New Hawaiian plant records for 2023. Bishop Museum Occasional Papers 156: 55-70  Morrison, C. (2024). Pohakuloa Training Area Invasive Plants Survey and Monitoring Specialist. Pers. Comm. 11 Mar  CABI. (2025). CABI Compendium Invasive Species. https://www.cabidigitallibrary.org/product/qi. [Accessed 13	Notes  [No negative impacts reported] "Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States. Material examined. MAUI: East Maui, Makawao Distr, Kanaio NAR, occasional, terrestrial, erect herbs, 622 m, 22 Dec 2015 Oppenheimer & M. Padgett H121503."  [No obvious negative environmental impacts observed in PTA, Hawa Island as of March 2024] "All of a sudden I am seeing quite a bit of this plant up at PTAalthough it has probably been here for some time and mistaken for ena'ena or other closely related species. I believe it is also an annual/biennial so maybe I have just not caught in at the right time. Seems like a pretty benign little plant but it caught mattention because of its' "sudden" appearance."
305	Source(s)  Oppenheimer, H. L. & Pezzillo, Z. (2024). New Hawaiian plant records for 2023. Bishop Museum Occasional Papers 156: 55-70  Morrison, C. (2024). Pohakuloa Training Area Invasive Plants Survey and Monitoring Specialist. Pers. Comm. 11 Mar  CABI. (2025). CABI Compendium Invasive Species. https://www.cabidigitallibrary.org/product/qi. [Accessed 13	Notes  [No negative impacts reported] "Previously documented from Hawai'i Island (Herbst et al. 2004: 4), the specimen at PTBG was examined by Christopher Warneke of Michigan State University and determined to be this species, representing a new record for Maui. The Hawai'i Island collection of this Mexican species was a new record for the United States. Material examined. MAUI: East Maui, Makawao Distr, Kanaio NAR, occasional, terrestrial, erect herbs, 622 m, 22 Dec 2015 Oppenheimer & M. Padgett H121503."  [No obvious negative environmental impacts observed in PTA, Hawai Island as of March 2024] "All of a sudden I am seeing quite a bit of this plant up at PTAalthough it has probably been here for some time and mistaken for ena'ena or other closely related species. I believe it is also an annual/biennial so maybe I have just not caught it at the right time. Seems like a pretty benign little plant but it caught m attention because of its' "sudden" appearance."

Oon #	Question	Angwor		
Qsn #	Question  Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	[A number of other species are listed as naturalized and/or weeds, including several previously classified in the genus Gnaphalium] "Pseudognaphalium luteoalbum (L.) Hilliard & B. L. Burtt Asteraceae Accepted name: Pseudognaphalium luteoalbum (L.) Hilliard & Burtt Total N° of Refs: 42 Global Risk Score: 8.64 Rating: Medium Preferred Climate/s: Subtropical, Tropical Origin: Europe Major Pathway/s: Contaminant, Crop, Herbal Dispersed by: Humans, Horse, Livestock, Vehicles Weed of: Pastures References: Australia-EN-7, Global-N-85, Denmark-W-711, United States of America-E-151, United States of America-N-101, Australia-		
		N-856, Australia-W-869, Mexico-I-878, Madagascar-N-1001, Chile-N-1229, La Reunion-A-1321, Madagascar-N-1000, Chile-N-1348, Global-ZD-1492, Global-ZD-1495, Denmark-W-1609, Egypt-A-1028, United States of America-E-1736, Chile-I-1872, Chile-E-1874, Mexico-N-1881, Egypt-A-1922, South Africa-N-1991."		
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	[Two species are categorized as weeds of unspecified impacts] "Pseudognaphalium arizonicum is first reported for Texas, and the nearly cosmopolitan weed." "Pseudognaphalium luteoalbum is previously known in the U.S.A. from Florida, New York, and several western states (California, Nevada, Arizona, Utah, Oregon, and Washington) (Kartesz 1999). It apparently is native to Eurasia and is a nearly cosmopolitan weed"		
401	Produces spines, thorns or burrs	n		
	Source(s)	Notes		
		[No evidence] "Plants annual herbs, taprooted. Stems 4-15 dm tall, persistently and closely white-tomentose, eglandular. Leaves narrowly elliptic to lanceolate, (3-)4-9(- 12) cm long, 5-10(-13) mm wide, usually long-tapering on both ends, sessile, not at all clasping or decurrent, strongly bicolored, glabrescent above and of ten shiny, eglandular but often appearing roughened with persistent, thick, glandlike trichome bases. Capitulescences compactly to diffusely corymboid to rounded-paniculate. Capitula 5-6 mm high; phyllaries tawny-whitish, very rarely pinkish. Pistillate florets 35-41 (Michoacan westward) or 49-59 (Edo. Mexico, Veracruz, and southward). Bisexual florets 2-4 (Michoacan westward) or 5-8 (Edo. Mexico, Veracruz, and southward). Cypselae with 4-8 shallow, longitudinal ridges, not papillate."		
402	Allelopathic			
	Source(s)	Notes		
	WRA Specialist. (2025). Personal Communication	Unknown. No evidence found		
403	Parasitic	n		
	Source(s)	Notes		
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Plants annual herbs, taprooted." [Asteraceae. No evidence]		

Unpalatable to grazing animals

404

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Qsn#	Question	Answer
	Source(s)	Notes
	Young, T. P., Kimuyu, D. M., Odadi, W. O., Wells, H. B., & Wolf, A. A. (2021). Naïve plant communities and individuals may initially suffer in the face of reintroduced megafauna: An experimental exploration of rewilding from an African savanna rangeland. PLoS One, 16(4), e0248855	"In particular, plots protected from large mammal herbivory were dominated by Brachiaria lachnantha, the grass most preferred by cattle [23] and Pseudognaphalium sp., a perennial forb that, although unpalatable, is sensitive to herbivore disturbance (Fig 2 in [20])."
	Rauber, R. B., Cendoya, M. A., Arroyo, D. N., & Bogino, S. M. (2023). Composición florística y funcional del pastizal natural del centro de la Argentina: Efecto del pastoreo bovino y el fuego. Asociación Argentina de Ecología. Ecología Austral 33 : 13-19	"Table 1. Functional groups of each species" [Pseudognaphalium gaudichaudianum - No Palatable]
	Arévalo, J. R., González-Montelongo, C., Encina- Domínguez, J. A., García, E., & Mellado, M. (2022). Changes in richness and species composition after five years of grazing exclusion in an endemic pasture of northern Mexico. Land, 11(11), 1962	"Table A1. Species family, scientific name, status, functional form, and palatability found in this study." [Pseudognaphalium luteoalbum = Non-palatable; Pseudognaphalium roseum = Non-palatable]
	Veblen, K. E., Porensky, L. M., Riginos, C., & Young, T. P. (2016). Are cattle surrogate wildlife? Savanna plant community composition explained by total herbivory more than herbivore type. Ecological Applications, 26(6), 1610-1623	[Unpalatability documented in genus] "Additionally, although unpalatable, the forb Pseudognaphalium increased with increasing protection from large herbivores."
	WRA Specialist. (2025). Personal Communication	There is limited direct research on the palatability of Pseudognaphalium attenuatum specifically, but plants in the Pseudognaphalium genus are generally not highlighted as significant forage sources in the literature, and most are listed as unpalatable.
405	Toxic to animals	n
	Source(s)	Notes
	Burrows, G. E., & Tyrl, R. J. (2013). Toxic Plants of North America. Second Edition. Wiley-Blackwell, Hoboken, NJ	No evidence
	Quattrocchi, U. (2012). CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL	No evidence
406	Host for recognized pests and pathogens	
	Source(s)	Notes
	WRA Specialist. (2025). Personal Communication	Unknown
407	Causes allergies or is otherwise toxic to humans	n
	Source(s)	Notes
	Burrows, G. E., & Tyrl, R. J. (2013). Toxic Plants of North America. Second Edition. Wiley-Blackwell, Hoboken, NJ	No evidence
	Quattrocchi, U. (2012). CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL	No evidence
408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes

Qsn#	Question	Answer
	Nesom, G. L. (2024). Caribbean species of Pseudognaphalium (Asteraceae: Gnaphalieae): Taxonomic summary. Phytoneuron, 9, 1-67	"Plants annual herbs, taprooted in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests." [In some ecosystems, plants like Pseudognaphalium attenuatum may play a minor role in fire cycles by providing fine fuels that help carry low-intensity fires. However, it is not typically cited as a major driver of fire behavior compared to grasses, shrubs, or trees.]
400		
409	Is a shade tolerant plant at some stage of its life cycle	n Natara
	Source(s)	Notes
	Nesom, G. L. (2024). Caribbean species of Pseudognaphalium (Asteraceae: Gnaphalieae): Taxonomic summary. Phytoneuron, 9, 1-67	" in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests."
	Selina Wamucii. (2025). Pseudognaphalium attenuatum - Uses, Benefits & Common Names. https://www.selinawamucii.com/plants/asteraceae/pseudognaphalium-attenuatum/. [Accessed 13 Feb 2025]	"It prefers full sun and well-drained soil."
	WRA Specialist. (2025). Personal Communication	Commonly found in disturbed areas, roadsides, fields, and other environments with ample sunlight. While it may tolerate some light shade, it is not typically described as a shade-tolerant species.
	·	
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	у
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Pseudognaphalium attenuatum is widespread in the southern half of Mexico and through most of Central America; it also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica). Over this range, it occurs at elevations of 60-2200 meters in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests." [A hardy plant that often grows in disturbed habitats, which suggests it can adapt to various soil types and conditions.]
411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Plants annual herbs, taprooted."
	Y	
412	Forms dense thickets	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	" in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests."
	Herbst, D.R., Staples, G.W. & Imada, C.T. (2004). New Hawaiian plant records for 2002-2003. Bishop Museum Occasional Papers 78: 3-12	[Abundant, but not described as forming dense stands] "Material cited. HAWAI'I: Ka'ü distr., near Kohala Blvd., makai of the Belt Rd, Kahuku, ubiquitous at 1500 ft in small sterile kïpuka, 10 Jan 1981, O. & I. Degener 35082 (GH, MO, SMU, TEX)."
	Oppenheimer, H. L. & Pezzillo, Z. (2024). New Hawaiian plant records for 2023. Bishop Museum Occasional Papers 156: 55-70	[No evidence] "Material examined. MAUI: East Maui, Makawao Distr, Kanaio NAR, occasional, terrestrial, erect herbs, 622 m, 22 Dec 2015 Oppenheimer & M. Padgett H121503."

Aquatic

501

Qsn #	Question	Answer
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Pseudognaphalium attenuatum is widespread in the southern half of Mexico and through most of Central America; it also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica). Over this range, it occurs at elevations of 60-2200 meters in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests."
502	Grass	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	Asteraceae
	T	
503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	Asteraceae
504	Geophyte (herbaceous with underground storage organs bulbs, corms, or tubers)	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Plants annual herbs, taprooted."
601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Pseudognaphalium attenuatum is widespread in the southern half of Mexico and through most of Central America; it also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica). Over this range, it occurs at elevations of 60-2200 meters in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests." [No evidence. Wide native range]
	·	
602	Produces viable seed	у
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	" Cypselae with 4-8 shallow, longitudinal ridges, not papillate."
	Nesom, G. L. (2024). Caribbean species of Pseudognaphalium (Asteraceae: Gnaphalieae): Taxonomic summary. Phytoneuron, 9, 1-67	"Achene surface smooth longitudinally ridged."
	Selina Wamucii. (2025). Pseudognaphalium attenuatum - Uses, Benefits & Common Names. https://www.selinawamucii.com/plants/asteraceae/pseudognaphalium-attenuatum/. [Accessed 14 Feb 2025]	"Pseudognaphalium attenuatum is a perennial herb that grows up to 1 m in height. It can be propagated from seed or by division of the rootstock."

Qsn#	Question	Answer
603	Hybridizes naturally	
	Source(s)	Notes
	McKenzie, R. J. (2001). Intergeneric hybridisation in New Zealand Gnaphalieae (Compositae). PhD Dissertation. University of Canterbury, Christchurch	[No intergeneric hybrids documented in genus] "Allan (1961) referred to putative hybrids between Pseudognaphalium luteoalbum and the adventive Gamochaeta purpurea (L.) Cabrera (syn. Gnaphalium pUlpureum L.), but these specimens have subsequently been determined as Gamochaeta purpurea (Drury, 1971; Webb, 1988). No putative intergeneric hybrids involving indigenous Craspedia, Ozothamnus andPseudognaphalium have been collected (Ward, 1997)."
	WRA Specialist. (2025). Personal Communication	Unknown. There is no specific information available on hybridization involving Pseudognaphalium attenuatum with other species in the genus Pseudognaphalium. However, hybridization is known to occur within the Asteraceae family, particularly among closely related species, and it is possible that P. attenuatum could hybridize with other members of its genus under the right conditions.

604	Self-compatible or apomictic	у
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Capitulescences compactly to diffusely corymboid to rounded- paniculate. Capitula 5-6 mm high; phyllaries tawny-whitish, very rarely pinkish. Pistillate florets 35-41 (Michoacan westward) or 49-59 (Edo. Mexico, Veracruz, and southward). Bisexual florets 2-4 (Michoacan westward) or 5-8 (Edo. Mexico, Veracruz, and southward)." [Potentially yes]
	Smissen, R. D., Breitwieser, I., & de Lange, P. J. (2023). Pseudognaphalium (Asteraceae, Gnaphalieae) diversity in New Zealand revealed by DNA sequences with notes on the phylogenetic relationships of Hawaiian Islands plants referred to Pseudognaphalium sandwicensium. New Zealand Journal of Botany, 61(4), 304-331	[Selfing documented in genus] "Therefore, P. ephemerum may also have highly female biased capitula and may also be highly selfing. McKenzie (2001) examined self-compatibility in Gnaphalieae including plants identified as P. luteoalbum var. luteoalbum and 'P. luteoalbum var. compactum Kirk' (nom. inval.) and found high levels of seed set in both hand-selfed and autonomously selfed capitula, but not in emasculated capitula."
	WRA Specialist. (2025). Personal Communication	Members of the genus Pseudognaphalium (commonly known as cudweeds) are generally considered self-compatible, meaning they can produce seeds through self-pollination. However, they often exhibit a preference for outcrossing (cross-pollination) to maintain genetic diversity. The reproductive strategies of Pseudognaphalium species can vary, but many rely on insect pollination and have adaptations to promote cross-pollination, such as protandry (male reproductive structures maturing before female ones).

605	Requires specialist pollinators	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Capitulescences compactly to diffusely corymboid to rounded-paniculate. Capitula 5-6 mm high; phyllaries tawny-whitish, very rarely pinkish. Pistillate florets 35-41 (Michoacan westward) or 49-59 (Edo. Mexico, Veracruz, and southward). Bisexual florets 2-4 (Michoacan westward) or 5-8 (Edo. Mexico, Veracruz, and southward)." [The likely pollinators are small insects, particularly those that are attracted to small, clustered flower heads (capitula) and can access the nectar and pollen. The absence of highly specialized floral structures (e.g., long corolla tubes or specific color patterns) suggests that P. attenuatum is pollinated by generalist insects rather than highly specialized ones.]

606	Reproduction by vegetative fragmentation	n
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Qsn#	Question	Answer
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Plants annual herbs, taprooted." [No evidence. Annual plants typically rely on seed production for reproduction rather than vegetative means.]
	Selina Wamucii. (2025). Pseudognaphalium attenuatum - Uses, Benefits & Common Names. https://www.selinawamucii.com/plants/asteraceae/pseudognaphalium-attenuatum/. [Accessed 14 Feb 2025]	"Pseudognaphalium attenuatum is a perennial herb that grows up to 1 m in height. It can be propagated from seed or by division of the rootstock."
007	<b>N</b>	
607	Minimum generative time (years)	1
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Plants annual herbs, taprooted."
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	
	Source(s)	Notes
	Nesom, G. L. (2024). Caribbean species of Pseudognaphalium (Asteraceae: Gnaphalieae): Taxonomic summary. Phytoneuron, 9, 1-67	"Pine woods, roadsides" [Occurrence along roadside suggests it pappus may facilitate movement. Plants may also be adapted to disturbed habitats common along roadsides]
702	Propagules dispersed intentionally by people	n
	Source(s)	Notes
	Selina Wamucii. (2025). Pseudognaphalium attenuatum - Uses, Benefits & Common Names. https://www.selinawamucii.com/plants/asteraceae/pseudognaphalium-attenuatum/. [Accessed 14 Feb 2025]	"Uses & Benefits Pseudognaphalium attenuatum is used as an ornamental plant in gardens and parks. It is also used as a source of food for livestock and as a source of nectar for bees."
	WRA Specialist. (2025). Personal Communication	Not widely known to be intentionally cultivated for ornamental, agricultural, or commercial purposes. Unlikely to be intentionally cultivated or introduced into the Hawaiian Islands
703	Propagules likely to disperse as a produce contaminant	
	Source(s)	Notes
	Herbst, D.R., Staples, G.W. & Imada, C.T. (2004). New Hawaiian plant records for 2002-2003. Bishop Museum Occasional Papers 78: 3-12	"Material cited. HAWAI'I: Ka'ü distr., near Kohala Blvd., makai of the Belt Rd, Kahuku, ubiquitous at 1500 ft in small sterile kïpuka, 10 Jan 1981, O. & I. Degener 35082 (GH, MO, SMU, TEX)." [Mode of introduction or dispersal unclear. Possibly a seed contaminant in livestock feed or soil]
	Τ	<u></u>
704	Propagules adapted to wind dispersal	у
	Source(s)	Notes
	FloraVeg.EU. (2025). Database of European Vegetation, Habitats and Flora. www.floraveg.eu	"Pseudognaphalium undulatum - Dispersal mode: Anemochory, Anthropochory" [Based on the dispersal mode of other species in the genus, it is presumed that Pseudognaphalium attenuatum seeds are also dispersed by wind and human activity]

Qsn#	Question	Answer
	Freire, S. E., Grossi, M. A., Bayon, N. D., & Monti, C. (2022). Morphometric Analysis and Synopsis of Pseudognaphalium (Gnaphalieae, Asteraceae) in North America. Anais da Academia Brasileira de Ciências, 94(4), e20200082	"The genus is mainly characterized by its herbaceous habitat and the presence of disciform, heterogamous capitula in clusters arranged in corymbs or panicles, the possession of monochromous phyllaries with a divided stereome, truncate style branches with apical sweeping hairs, achenes either glabrous or with short oblong myxogenic duplex hairs, and pappus bristles free at the base."
	WRA Specialist. (2025). Personal Communication	Pseudognaphalium, a genus of flowering plants in the Asteraceae family, primarily disperses its seeds through wind, a mechanism known as anemochory. The seeds are small, lightweight, and equipped with a pappus—a feathery, hair-like structure that acts as a parachute, enabling them to be carried by air currents over long distances.
705	Propagulae water dispersed	
705	Propagules water dispersed	n N
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Over this range, it occurs at elevations of 60-2200 meters in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests." [Unlikely. Not reported from riparian areas, although secondary dispersal by water may potentially occur]
700	Burna makas kitad dibana ana d	
706	Propagules bird dispersed	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Cypselae with 4-8 shallow, longitudinal ridges, not papillate." [There is no direct evidence to suggest that Pseudognaphalium attenuatum seeds are specifically dispersed by birds. Not fleshy-fruited]
707	Propagules dispersed by other animals (externally)	
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Cypselae with 4-8 shallow, longitudinal ridges, not papillate." [The seeds of P. attenuatum are more likely adapted for wind dispersal (anemochory) or mechanical dispersal, given their small size and shallow ridges. These are the primary dispersal mechanisms for many Asteraceae species.]
708	Propagules survive passage through the gut	n
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Cypselae with 4-8 shallow, longitudinal ridges, not papillate." [While it is theoretically possible for Pseudognaphalium attenuatum seeds to survive gut passage, there is no direct evidence to support this. The seeds are more likely adapted for wind dispersal or mechanical dispersal, and animal ingestion is unlikely to play a significant role in their dispersal ecology.]
801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	[Densities unknown] "Cypselae with 4-8 shallow, longitudinal ridges, not papillate."

Evidence that a persistent propagule bank is formed (>1 yr)

802

Qsn#	Question	Answer
	Source(s)	Notes
	Baskin, C. C., & Baskin, J. M. (2023). Seed dormancy in Asteraceae: a global vegetation zone and taxonomic/phylogenetic assessment. Seed Science Research, 33(2), 135-169	[Unknown. Non-dormancy documented in genus] "We found that when freshly matured cypselae of Amphiachyris dracunculoides, Arctium minus, Coreopsis tinctoria, Erigeron philadelphicus, Helenium amarum, Pseudognaphalium obtusifolium and Senecio sylvaticus were tested over a range of temperatures, 95-100% of them germinated in light with relatively low germination percentages in darkness. Treatments such as cold stratification, however, did not increase germination in darkness in H. amarum (e.g. Baskin and Baskin, 1973). Thus, we concluded that cypselae of these Asteraceae are not dormant. As discussed below, non-dormancy has been found in the cypselae of many species of Asteraceae."
803	Well controlled by herbicides	<u> </u>
	Source(s)	Notes
	WRA Specialist. (2025). Personal Communication	Unknown. No information on herbicide efficacy or chemical control attempted on this species.
804	Tolerates, or benefits from, mutilation, cultivation, or fire	
804	Tolerates, or benefits from, mutilation, cultivation, or fire  Source(s)	Notes
804		Notes  "Plants annual, taprooted or fibrous-rooted." [Taproot may allow for plant to survive or recover from damage]
804	Source(s)  Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA,	"Plants annual, taprooted or fibrous-rooted." [Taproot may allow for
804	Source(s)  Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Plants annual, taprooted or fibrous-rooted." [Taproot may allow for plant to survive or recover from damage]
804	Source(s)  Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190	"Plants annual, taprooted or fibrous-rooted." [Taproot may allow for plant to survive or recover from damage]
	Source(s)  Nesom, G. L. (2001). New records in Pseudognaphalium (Asteraceae: Gnaphalieae) for the United States. SIDA, Contributions to Botany, 19(4), 1185-1190  WRA Specialist. (2025). Personal Communication  Effective natural enemies present locally (e.g. introduced	"Plants annual, taprooted or fibrous-rooted." [Taproot may allow for plant to survive or recover from damage]

## **SCORE**: 7.0

RATING: High Risk

#### **Summary of Risk Traits:**

Pseudognaphalium attenuatum (tapered cudweed) is a taprooted annual herbs, 40-150 cm tall, widespread in the southern half of Mexico and through most of Central America. It also occurs in the West Indies (at least in Cuba, Puerto Rico, and Jamaica) at elevations of 60-2200 meters in fields, secondary vegetation, woodlands of oak, oak-pine, and pine, and sometimes in subtropical forests. The leaves are narrow, linear to lanceolate, and often covered with fine, woolly hairs, giving them a silvery or grayish appearance.

It is currently reported to be naturalized on the islands of Maui and Hawaii, and could potentially compete with or threaten native plants where it occurs, but no negative impacts have been reported to date.

### High Risk / Undesirable Traits

- · Broad elevation range
- Thrives and can spread in regions with tropical climates
- · Naturalized on Maui and Hawaii
- · Other species in the genus are reported to be weeds
- Unpalatable to grazing animals
- Tolerates many soil types (not limited by substrate)
- · Reproduces by seed
- Presumably self-compatible (capable of self-fertilization and seed production)
- Reaches maturity in 1 growing season
- · Seeds dispersed by wind and possibly as a seed or soil contaminant

#### Low Risk Traits

- No negative impacts documented within native or naturalized range
- Unarmed (no spines, thorns, or burrs)
- · Not reported to be toxic
- Grows best in high light environments (dense shade may inhibit spread)