

TIPPC Plant Assessment Form

For use with “[Criteria for Categorizing Invasive Non-Native Plants that Threaten Wildlands](#)”
by the California Invasive Plant Council and the Southwest Vegetation Management Association

Version February 2003, modified July 2009 for the Texas Invasive Plant & Pest Council –
www.texasinvasives.org

Table 1. Species and Evaluator Information

Species name (Latin binomial):	Macfadyena unguis-cati
Synonyms:	<i>Batocydia unguis-cati</i> (L.) Mart. ex Britt., <i>Bignonia tweedieana</i> Lindl., <i>Bignonia unguis-cati</i> L., <i>Doxantha unguis-cati</i> (L.) Miers
Common names:	Catclaw Vine
Evaluation date (mm/dd/yy):	06/20/2011
Evaluator #1 Name/Title:	Travis Gallo/Ecologist
Affiliation:	The Lady Bird Johnson Wildflower Center
Phone numbers:	512-232-0116
Email address:	tgallo@wildflower.org
Address:	4801 La Crosse Ave., Austin, Texas 78704
Evaluator #2 Name/Title:	enter text here
Affiliation:	enter text here
Phone numbers:	enter text here
Email address:	enter text here
Address:	enter text here

Section below for list committee use—please leave blank

List committee members:	enter text here
Committee review date:	enter text here
List date:	enter text here
Re-evaluation date(s):	enter text here

<p>General comments on this assessment: Originally assessed for the City of Austin Invasive Management Plan</p>
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Table 2. Criteria, Section, and Overall Scores

Species: enter text here

Region: enter text here

1.1	Impact on abiotic ecosystem processes	B	Other Pub. Mat'l
1.2	Impact on plant community	A	Other Pub. Mat'l
1.3	Impact on higher trophic levels	E	No Information
1.4	Impact on genetic integrity	D	No Information

Impact

Enter four characters from Q1.1-1.4 below:

BAED

Using matrix, determine score and enter below:

B

2.1	Role of anthropogenic and natural disturbance	A	Other Pub. Mat'l
2.2	Local rate of spread with no management	A	Other Pub. Mat'l
2.3	Recent trend in total area infested within state	B	Observational
2.4	Innate reproductive potential Wksht A	A	Other Pub. Mat'l
2.5	Potential for human-caused dispersal	B	Other Pub. Mat'l
2.6	Potential for natural long-distance dispersal	A	Other Pub. Mat'l
2.7	Other regions invaded	C	Observational

Invasiveness

Enter the sum total of all points for Q2.1-2.7 below:

17

Use matrix to determine score and enter below:

A

Plant Score

Using matrix, determine Overall Score and Alert Status from the three section scores and enter below:

Moderate

No Alert

3.1	Ecological amplitude/Range	A	Other Pub. Mat'l
3.2	Distribution/Peak frequency Wksht C	A	Other Pub. Mat'l

Distribution

Using matrix, determine score and enter below:

A

Documentation

Average of all questions

2.15

Table 3. Documentation (List all references at end of PAF. Short citations may be used in Table 3.)

Impacts	
Question 1.1 Impact on abiotic ecosystem processes	B Other Pub. Mat'l back
Identify ecosystem processes impacted: Can cover ground with thick vegetation becoming dominant ground cover reducing light availability for new growth in forests.	
Sources of information: enter text here Florida Exotic Pest Plant Council (FLEPPC). Undated. <i>Macfadyena unguis-cati</i> (L.) A. Gentry. Florida Exotic Pest Plant Council Website. Accessed 20 June 2011: http://www.fleppc.org/ID_book/Macfadyena%20unguis-cati.pdf . McClymont, Ken. 1996. Cat's Claw Creeper (<i>Macfadyena unguis-cati</i>). BRAIN (Brisbane Rainforest Action & Information Network) Newsletter, April 1996.	
Question 1.2 Impact on plant community composition, structure, and interactions	A Other Pub. Mat'l back
Identify type of impact or alteration: Becomes dominant ground cover in forest environments. Will kill mature trees by weight and reducing light. Known as an ecosystem "transformer".	
Sources of information: enter text here Florida Exotic Pest Plant Council (FLEPPC). Undated. <i>Macfadyena unguis-cati</i> (L.) A. Gentry. Florida Exotic Pest Plant Council Website. Accessed 20 June 2011: http://www.fleppc.org/ID_book/Macfadyena%20unguis-cati.pdf . McClymont, Ken. 1996. Cat's Claw Creeper (<i>Macfadyena unguis-cati</i>). BRAIN (Brisbane Rainforest Action & Information Network) Newsletter, April 1996. PIER (Pacific Island Ecosystems at Risk) 1999. <i>Macfadyena unguis-cati</i> (L.) Gentry, Bignoniaceae. Accessed 20 June 2011: http://www.hear.org/Pier/species/macfadyena_unguis-cati.htm .	
Question 1.3 Impact on higher trophic levels	E No Information back
Identify type of impact or alteration: No known impact to higher trophic levels.	
Sources of information: enter text here	
Question 1.4 Impact on genetic integrity	D No Information back
Identify impacts: enter text here No known hybridization with native flora.	
Sources of information: enter text here	
Invasiveness	
Question 2.1 Role of anthropogenic and natural disturbance in establishment	A Other Pub. Mat'l back
Describe role of disturbance: enter text here Can invade undisturbed forest readily.	
Sources of information:	

<p>Florida Exotic Pest Plant Council (FLEPPC). Undated. <i>Macfadyena unguis-cati</i> (L.) A. Gentry. Florida Exotic Pest Plant Council Website. Accessed 20 June 2011: http://www.fleppc.org/ID_book/Macfadyena%20unguis-cati.pdf.</p> <p>McClymont, Ken. 1996. Cat's Claw Creeper (<i>Macfadyena unguis-cati</i>). BRAIN (Brisbane Rainforest Action & Information Network) Newsletter, April 1996.</p> <p>PIER (Pacific Island Ecosystems at Risk) 1999. <i>Macfadyena unguis-cati</i> (L.) Gentry, Bignoniaceae. Accessed 20 June 2011: http://www.hear.org/Pier/species/macfadyena_unguis-cati.htm.</p>	
Question 2.2 Local rate of spread with no management	A Other Pub. Mat'l back
<p>Describe rate of spread: May stay in seedling stage for a while, but once tuber is formed it spreads quickly. Population can double in less than 10 years without management.</p>	
<p>Sources of information: enter text here</p> <p>Florida Exotic Pest Plant Council (FLEPPC). Undated. <i>Macfadyena unguis-cati</i> (L.) A. Gentry. Florida Exotic Pest Plant Council Website. Accessed 20 June 2011: http://www.fleppc.org/ID_book/Macfadyena%20unguis-cati.pdf.</p> <p>Gallo, T. 2008. TexasInvasives.org Invasive Plant Database: <i>Macfadyena unguis-cati</i>. Accessed 20 June 2011: http://texasinvasives.org/plant_database/detail.php?symbol=MAUN3.</p> <p>Observational: T. Gallo</p>	
Question 2.3 Recent trend in total area infested within state	B Observational back
<p>Describe trend: no information</p> <p>Could not double statewide in less than 10 years. Are is increasing due to the spread of local populations.</p>	
<p>Sources of information: enter text here</p> <p>Observational: T. Gallo</p>	
Question 2.4 Innate reproductive potential	A Other Pub. Mat'l back
<p>Describe key reproductive characteristics:</p> <p>Refer to Worksheet A.</p>	
<p>Sources of information:</p> <p>PIER (Pacific Island Ecosystems at Risk) 1999. <i>Macfadyena unguis-cati</i> (L.) Gentry, Bignoniaceae. Accessed 20 June 2011: http://www.hear.org/Pier/species/macfadyena_unguis-cati.htm.</p> <p>National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG). 2008. Global Invasive Species Database: <i>Macfadyena unguis-cati</i>. Accessed 20 June 2011: http://www.invasivespecies.net/database/species/ecology.asp?si=1227&fr=1&sts=&lang=EN.</p>	
Question 2.5 Potential for human-caused dispersal	B Other Pub. Mat'l back
<p>Identify dispersal mechanisms: enter text here</p> <p>Cat claw Vine is available and commonly sold at nurseries. It is also promoted through the TX AgriLife Extension as an "Earthwise" plant.</p>	
<p>Sources of information: enter text here</p> <p>Mueller, C. 2009. <i>CatClaw Vine (MacFadyena unguis-cati)</i>. Texas AgriLife Extension Service, Texas A&M University, College Station, Texas. Accessed 20 June 2011: http://aggie-horticulture.tamu.edu/newsletters/hortupdate/2009/apr09/Catclaw.html</p> <p>Observational: T. Gallo</p>	

Question 2.6 Potential for natural long-distance dispersal	A Other Pub. Mat'l back
Identify dispersal mechanisms: enter text here	
Seeds are wind and water dispersed. Also, vines grow quickly along the ground and reroor at nodes.	
Sources of information: enter text here	
National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG). 2008. Global Invasive Species Database: Macfadyena unguis-cati. Accessed 20 June 2011: http://www.invasivespecies.net/database/species/ecology.asp?si=1227&fr=1&sts=&lang=EN .	
Question 2.7 Other regions invaded	C Observational back
Identify other regions: enter text here	
All ecoregions have been invaded	
Sources of information: enter text here	
Observational: T. Gallo	
Distribution	
Question 3.1 Ecological amplitude/Range	A Other Pub. Mat'l back
Describe ecological amplitude, identifying date of source information and approximate date of introduction to the state, if known: enter text here	
Refer to Worksheet B	
Sources of information: enter text here	
Invaders of Texas Citizen Science Program (Accessed 20 June 2011: http://texasinvasives.org/observations/search.php?satellite=&sn=MAUN3&cn=).	
USDA PLANTS Database (Accessed 20 June 2011: http://plants.usda.gov/java/county?state_name=Texas&statefips=48&symbol=MAUN3).	
Question 3.2 Distribution/Peak frequency	A Other Pub. Mat'l back
Describe distribution: enter text here	
Refer to Worksheet B	
Sources of information: enter text here	
Invaders of Texas Citizen Science Program (Accessed 20 June 2011: http://texasinvasives.org/observations/search.php?satellite=&sn=MAUN3&cn=).	
USDA PLANTS Database (Accessed 20 June 2011: http://plants.usda.gov/java/county?state_name=Texas&statefips=48&symbol=MAUN3).	

References

List full citations for all references used in the PAF (short citations such as DiTomaso and Healy 2007 may be used in table above). **Websites** should include the name of the organization and the date accessed. **Personal communications** should include the affiliation of the person providing the observation. Enter each reference on a separate line; the table will expand as needed.

Examples:

Mitich, L. W. 1995. Intriguing world of weeds: Tansy ragwort. *Weed Technology*. 9: 402-404.

HEAR. Date unknown. *Emex spinosa*. Hawaiian Ecosystems at Risk.
www.hear.org/pier/species/emex_spinosa.htm. Accessed March 17, 2009

DiTomaso, J. M. Personal communication from Dr. Joe DiTomaso, Dept. of Plant Science, UC Davis. Email received 3/17/09.

enter text here

Worksheet A

Reaches reproductive maturity in 2 years or less	0
Dense infestations produce >1,000 viable seed per square meter	2
Populations of this species produce seeds every year.	1
Seed production sustained over 3 or more months within a population annually	0
Seeds remain viable in soil for three or more years	0
Viable seed produced with <i>both</i> self-pollination and cross-pollination	1
Has quickly spreading vegetative structures (rhizomes, roots, etc.) that may root at nodes	1
Fragments easily and fragments can become established elsewhere	0
Resprouts readily when cut, grazed, or burned	1
	6 1
	A
Note any related traits: enter text here	

Notes for Worksheet B - Texas Ecoregions

Question 3.1

Ecological amplitude

Refer to the worksheet and select the one letter below that indicates the number of different ecological types that this species invades in your state.

- A. Widespread—the species invades at least three Level III ecoregions **or** at least 22 Level IV ecoregions.
- B. Moderate—the species invades two Level III ecoregions 8 Level IV ecoregions.
- C. Limited—the species invades only one Level III ecoregion **and** two to six Level IV ecoregions.
- D. Narrow—the species invades only one Level IV ecoregion.
- U. Unknown.

Worksheet B - Texas Ecoregions (Griffen et al, 2004).

* A. means >50% of type occurrences are invaded; B means >20% to 50%;
 C. means >5% to 20%; D. means present but ≤5%; U. means unknown

Code	Level III	Level IV	Score
ER01	Arizona/New Mexico Mountains	Chihuahuan Desert Slopes	
		Montane Woodlands	
ER02	Chihuahuan Deserts	Chihuahuan Basins and Playas	
		Chihuahuan Desert Grasslands	
		Low Mountains and Bajadas	
		Chihuahuan Montane Woodlands	
		Stockton Plateau	
ER03	High Plains	Rolling Sand Plains	
		Canadian/Cimarron High Plains	
		Llano Estacado	
		Shinnery Sands	
		Arid Llano Estacado	
ER04	Southwestern Tablelands	Canadian/Cimarron Breaks	
		Flat Tablelands and Valleys	
		Caprock Canyons, Badlands, and Breaks	
		Semiarid Canadian Breaks	
ER05	Central Great Plains	Red Prairie	
		Broken Red Plains	
		Limestone Plains	
ER06	Cross Timbers	Eastern Crossttimbers	
		Western Crossttimbers	
		Grand Prairie	
		Limestone Cut Plain	
		Carbonate Cross Timbers	
ER07	Edwards Plateau	Edwards Plateau Woodland	
		Llano Uplift	
		Balcones Canyonlands	A
		Semiarid Edwards Plateau	
ER08	Southern Texas Plains	Northern Nueces Alluvial Plains	
		Semiarid Edwards Bajadas	
		Texas-Tamaulipan Thornscrub	
		Rio Grande Floodplain and Terraces	
ER09	Texas Blackland Prairies	Northern Blackland Prairies	
		Southern Blackland/Fayette Prairie	
		Floodplains and Low Terraces	
ER10	East Central Texas Plains	Northern Post Oak Savanna	
		Southern Post Oak Savanna	A
		San Antonio Prairie	
		Northern Prairie Outliers	
		Bastrop Lost Pines	
		Floodplains and Low Terraces	
ER11	Western Gulf Coastal Plain	Northern Humid Gulf Coastal Prairies	C
		Southern Subhumid Gulf Coastal Prairies	A
		Floodplains and Low Terraces	
		Coastal Sand Plain	
		Lower Rio Grande Valley	
		Lower Rio Grande Alluvial Floodplain	
		Texas-Louisiana Coastal Marshes	
		Mid-Coast Barrier Islands and Coastal Marshes	
Laguna Madre Barrier Islands and Coastal Marshes			
ER12	South Central Plains	Tertiary Uplands	
		Floodplains and Low Terraces	
		Pleistocene Fluvial Terraces	
		Southern Tertiary Uplands	
		Flatwoods	
		Red River Bottomland	

