INTEGRATED PEST MANAGEMENT PRESCRIPTION

Jubata grass, Andean pampas grass (Cortadería jubata)

Description: Jubata grass is a rapid-growing perennial, tussock type grass (tussock grasses grow in mounded tufts). This grass forms large clumps of long, narrow, dark green spreading leaves that grow from 5 to 7 feet tall. The leaves have sharply serrated or jagged edges. The huge feathery flower plumes reach up to three times higher than the clumps of leaves (15-20 feet). Jubata grass can easily be confused with the more familiar "pampas grass" (*Cortaderia selloana*). The table below shows some of the distinguishing characteristics.

Characteristic	Jubata Grass	Pampas Grass
Leaf growth	Horizontal arching outward from the base	Erect, fountain like
Leaf color	Dark green	Bluish gray-green
Leaf tip	Not bristly or curly	Bristly and curly
Flower stalk height	Up to 3 times the height of foliage	Equal to or slightly taller than the clump
Flower size	1 to 3 feet long	1 to 4 feet long
Flower color	Pinkish to deep violet	Light violet to silvery white



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Impacts:

Jubata grass is highly invasive due to its broad habitat range, prolific seed production, rapid growth and accumulation of above-ground and below-ground biomass. It's large size allows it to acquire light, moisture, and nutrients that would be otherwise be used by native plants. It can be damaging to natural areas even at low densities because of the amount of cover it can occupy. Jubata grass can create a fire hazard through excessive build up of dry leaves, and flowering stalks.

These plants can flower in their first year of growth, and established plants can flower twice during the same season. Although all plants produce only female flowers, viable seeds develop without pollination. An individual flower can produce 100,000 seeds, and a large clump can produce a million or more seeds.

Spread occurs by wind-blown seeds from plants in landscaping or by people gathering mature flowers for decorative arrangements. Seeds have been reported to disperse over twenty miles in windy conditions. Jubata grass can also reproduce vegetatively from fragmented roots and root shoots.

Control Options: Thurston County's Integrated Pest Management emphasizes cultural, biological, and manual control methods to keep pests and vegetation problems low enough to prevent damage. The goal of Thurston County's Integrated Pest Management is to minimize the use of pesticides by utilizing and providing information about the most effective control options that are available and practical.

Cultural / Habitat

Do not intentionally plant jubata grass in your landscape. Report any escaped plants to the Noxious Weed Control agency that look like jubata grass and **are** *clearly growing where they were not intentionally planted*.

► Biological

There are no biological control agents available for jubata grass.

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Manual / Mechanical

Small plants can be hand pulled or dug out with a shovel or pick. Large, established plants may require cutting the tops first before attempting to dig out their large root masses. Carefully cut and dispose of all flower plumes. Even immature flower stalks should be disposed of as they are capable of maturing and spreading seed after removal. Root material should also be contained as new plants can start from root fragments, and roots left in contact with soil can sprout. Be sure to wear gloves and protective clothing, as the sharp leaf edges can cause injury.

Chemical

Herbicides containing the active ingredient glyphosate (like Roundup Pro[™] and many products) are effective in controlling jubata grass.



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Spot treatment means you spray only the weed you wish to control and not the surrounding soil or other vegetation. When applying spot treatments, spray the leaves and stems of each plant thoroughly enough so that they are wet, but not dripping. Many glyphosate products have an initial glyphosate concentration of 41% and are recommended for diluting to exact percentage solutions. Herbicides labeled for spot treatment generally recommend mixing the product with water to create a specified percentage solution. For example, the Roundup Pro[™] label recommends mixing a 1.5–2% solution for hand-held or spot applications for control of pampas grass (<u>University of California Cooperative Extension reports effect control of jubata grass at 2% product spray solution</u>).

As an alternative to spraying entire plants, you can cut away the stems and taller portions of the foliage, then spot apply herbicide to the remaining green vegetation. This method may not be as effective as spraying the entire plant without cutting, but can make treatment of plants near landscaping or more desirable vegetation possible. Monitoring for regrowth is important with either technique, as plants that appear dead soon after spraying may survive and grow the following year. Check for sprouts twice a year, and remove or spray them whenever they are seen.



Foliar Application of Roundup Pro[™] (a 41% glyphosate product):

To 1 gallon of water add:	2.66 oz. Roundup Pro™ (for a 2% product spray solution)
1 fluid ounce = 2 Tablespoon	

Timing: Plants can be treated anytime they are green in color, though late season (September/October) treatments are known to be somewhat more effective. Do not treat dormant plants when the foliage is brown and/or gray. Remove and dispose of flower spikes whenever they appear.

READ AND FOLLOW ALL LABEL DIRECTIONS AND RESTRICTIONS. Use of brand names does not imply endorsement and is for reference only; other formulations of the same herbicides may be available under other names. Information provided is current as of the date of the fact sheet. Pesticide product registration is renewed annually and product names and formulations may year to year.

(c)John M. Randall/The Nature Conservancy product names and formulations may vary from year to year.

REFERENCES:

California Invasive Plant Council, Invasive Plants of California's Wildland: Cortaderia jubata http://www.cal-ipc.org/ip/management/ipcw/pages/detailreport.cfm@usernumber=33&surveynumber=182.php

Oregon Department of Agriculture, Noxious Weed Control Plant Profiles: Jubata Grass <u>http://www.oregon.gov/ODA/</u> PLANT/WEEDS/profile_jubatagrass.shtml

The Weed Workers' Handbook, by The Watershed Project and California Invasive Plant Council, 2004, pages 96-98. <u>http://www.cal-ipc.org/ip/management/wwh/pdf/18601.pdf</u>

The Nature Conservancy, Element Stewardship Abstract for *Cortaderia jubata* <u>http://tncinvasives.ucdavis.edu/esadocs/</u> <u>documnts/cortjub.pdf</u>



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