

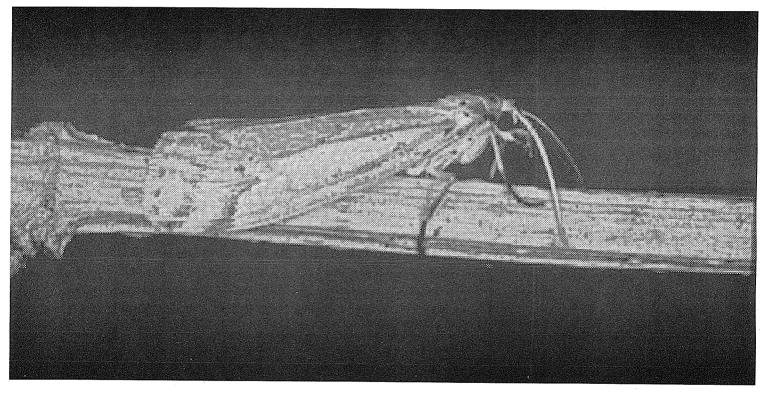
CalEDD Exotic

Volume 9 Number 1

A quarterly publication of the California Exotic Pest Plant Council

Winter 2001

Guess Who's Coming to Dinner?



Acrolepia adult. See p. 3.

Hold that date!

10th Anniversary CalEPPC Symposium

Handlery Hotel, San Diego October 5, 6, 7th, 2001

In This Issu

ear arroy and the	
Biocontrol of Cape ivy Reaches Milestone	3
Test Plants Needed for Cape ivy Biocontrol	4
Cape ivy Donors	6
Asparagus asparagoides	7
Invasive Plants of California's Wildlands	8
Saharan Mustard Working Group	8
Exotic Pest Plants, CAN, & CalEPPC	9
New Members	10
Noxious Weed Listing at Critical Point	11

Who We Are

CalEPPC NEWS is published quarterly by the California Exotic Pest Plant Council, a non-profit organization. The objects of the organization are to:

- provide a focus for issues and concerns regarding exotic pest plants in California;
- facilitate communication and the exchange of information regarding all aspects of exotic pest plant control and management;
- provide a forum where all interested parties may participate in meetings and share in the benefits from the information generated by this council;
- promote public understanding regarding exotic pest plants and their control;
- serve as an advisory council regarding funding, research, management and control of exotic pest plants;
- facilitate action campaigns to monitor and control exotic pest plants in California; and
- review incipient and potential pest plant management problems and activities and provide relevant information to interested parties.



Please Note:

The California Exotic Pest Plant Council is a California 501(c)3 non-profit, public benefit corporation organized to provide a focus for issues and concerns regarding exotic pest plants in California, and is recognized under federal and state tax laws as a qualified donee for tax deductible charitable contribution.

2000 CalEPPC Officers & Board Members

Officers

President Mike Kelly mkellysd@aol.com
Vice-president Joe DiTomaso jmditomaso@ucdavis.edu
Secretary Mona Robison

Treasurer Sally Davis sallydavis@aol.com
Past-president Mike Pitcairn mpitcairn@cdfa.ca.gov

At-large Board Members

Joe Balciunas* joebalci@pw.usda.gov Carl Bell** cebell@ucdavis.edu Matt Brooks* matt_brooks@usgs.gov Carla Bossard* bossard3@pacbell.net Paul Caron** PAUL_CARON@DOT.CA.GOV Tom Dudlev* tududley@socrates.berkeley.edu Jack Massera** imassera@worldnet.att.net Steve Schoenig* sschoenig@cdfa.ca.gov Becky Waegel** bwaegell@cosumnes.org Bill Winans** BWinanAG@co.san-diego.ca.us

Working Group Chairpersons

Artichoke thistle	Mike Kelly	858-566-6489	mkellysd@aol.com
Arundo	Tom Dudley	510-643-3021	tdudley@socrates.berkeley.ede
Brooms	Karen Haubensak	510-643-5430	katenah@socrates.berkeley.edu
Cape ivy	Mona Robison	916-451-9820	raroison@ucdavis.edu
Cortaderia spp.	Joe DiTomaso	530-754-8715	jmditomaso@ucdavis.edu
Fennel	Jennifer Erskin	530-752-1092	jaerskine@ucdavis.edu
Lepidium	Joel Trumbo	916-358-2952	jtrumbo@dfg.ca.gov
Saharan mustard	Jim Dice	760-767-3074	jdice@statepark.org
Saltcedar	Bill Neill	714-779-2099	bgneill@earthlink.net
Spartina spp.	Debra Ayres	530-752-6852	drayres@ucdavis.edu
Veldt grass	Dave Chipping	805-528-0914	dchippin@rubens.artisan.calpoly
			.edu

Volunteers Maria Alvarez 415-331-0732

Yellow starthistle Mike Pitcairn 916-262-2049 mpitcairn@cdfa.ca.gov

CalEPPC web site: www.caleppc.org

CalEPPC News Editor: Mike Kelly (see above for address)

Submission Dates for CalEPPC News

If you'd like to submit a news item, article, meeting announcement, or job opportunity for publication in the CalEPPC News, it must be received by the deadlines listed below. Editor reserves the right to edit all submissions. Send your text/disk/email to editor's address above.

Submission Dates:

Spring . . . May 15 Summer. . . July 15 Fall. . . October 15

The articles contained herein were contributed to the CalEPPC newsletter. These articles represent the opinions of the authors and do not necessarily reflect the views of CalEPPC. Although herbicide recommendations may have been reviewed in contributed articles, CalEPPC does not guarantee their accuracy with regard to efficiency, safety, or legality.

^{*} Term expires Dec. 31, 2001 / **Terms expires Dec. 31, 2002

Biological Control of Cape Ivy Project Reaches Milestone

Joe Balciunas

Since 1997, CalEPPC, in partnership with the California Native Plant Society (CNPS), has spearheaded a campaign to raise funds to assist a USDA-ARS project to develop biological control agents for Cape ivy, Delairea odorata (synonym, Senecio mikanioides). USDA-ARS does not receive sufficient funds from Congress to fully fund the research on Cape ivy, and we were unable to perform the necessary overseas research. In each of the past four years, CalEPPC and CNPS have been successful in raising \$45,000-65,000 annually, which was then contributed to the Cape Ivy Project at the USDA quarantine in Albany, CA. As leader of this project, I then used the CalEPPC/ CNPS contributions to contract research in South Africa, the native home of Cape ivy, to locate and develop potential biological control agents. I was fortunate enough to obtain the services of several talented South African scientists for this project. Each year, I provide a research plan to these cooperating scientists, then spend 4-5 weeks with them in South Africa, assisting in the research, reviewing their results, and jointly planning the research for the following year.

Year 3 of Cape ivy research in South Africa was completed in March 2001. During the first year, the South African team, led by Beth Grobbelaar, located Cape ivy populations throughout South Africa, and collected the natural enemies that attack it. This was not an easy task. In South Africa, Cape ivy is a very uncommon plant, and even expert botanists had never seen a plant in the wild. Nevertheless, our team was successful in locating Cape ivy at several dozen sites. Over 200 species of plant-injuring insects were

collected on Cape ivy at these sites (see article in the CalEPPC 2000 Symposium Proceedings).

We selected the six most promising of these insects, and during the second year of research, tried to collect these six insects on relatives of Cape ivy growing at these sites. More than a dozen close relatives of Cape ivy were repeatedly examined, but only one of the six insects, an arctiid moth — Diota rostrata, was ever collected on anything but Cape ivy. Thus, it would appear that at least five insects are very host-specific to Cape ivy. These insects are likely to survive further intensive testing of their host range (the plants on which each insect species will feed and develop).

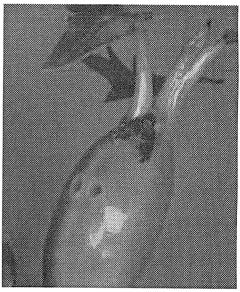
During the third year (2000-01), research in South Africa focused on learning more about the biology, safety, and impact of some of the most promising insects. This research phase was led by the eminent South African weed biocontrol specialist, Dr. Stefan Neser, and his assistant Liamé van der Westhuisen. Eventually, they established laboratory colonies of two Cape ivy insects: the stem-boring moth *Acrolepia* new species, and the gall-

... in South Africa Cape ivy is a very uncommon plant, and even expert botanists had never seen a plant in the wild. [!]

forming fly *Parafreutreta regalis*. Joanna Wing, a USDA-sponsored graduate student at Wits University in Johannesburg, has nearly completed her M.Sc. research, concentrating on the biology of the arctiid moth, *Diota rostrata*. And Beth

Grobbelaar was able to temporarily maintain a colony of chrysomelid beetles that severely damage the leaves of Cape ivy – but this colony died out.

Dr. Neser made great progress in his studies of *Acrolepia* and *Parafreu*-



Parafreutreta adult on gall.

treta. I'm convinced that not only will these two insects prove host-specific enough to release, but that we now know enough about their biology to successfully rear them in our USDA quarantine in Albany, CA. Hence, I obtained the necessary import permits, and when I returned from South Africa on Jan. 9, 2001, I hand-carried both these insects back to our quarantine. As these are the first Cape ivy insects to be imported into the United States, they represent a significant milestone.

The stem-boring moth (*Acrolepia* n. sp.) was discovered during our surveys and appears to be new to science and never before described. It is, however, one of the most widely distributed of Cape ivy natural enemies, and we collected it at nearly all our Cape ivy sites in South Africa. This tiny moth (less than a inch

in length) lays eggs within the leaf of Cape ivy. Minute caterpillars hatch out and tunnel within the leaves, leaving a distinctive narrow "mines." Some of the caterpillars bore down through the leaf petiole, and then bore inside the stem of Cape ivy. In the lab, most of the mined leaves, and many of the bored stems die, and sometimes the entire Cape ivy plant is killed.

The gall fly, Parafreutreta regalis, is a fruit fly (family Tephritidae) that appears to specialize on Cape ivy. The female Parafreutreta, about the size of a large housefly, lays eggs inside the growing tip of Cape ivy. The little maggot that hatches out inside the tip convinces Cape ivy to grow a spherical structure, about a inch in diameter, within which the maggot completes its life cycle. These galls seem to inhibit further elongation of that stem, although side shoots are usually produced. The weight of the gall causes the stem to droop, and most galls are beneath a "mat" of Cape ivy. We theorize that "galled" Cape ivy plants will be less aggressive in clambering over native trees and shrubs.

With these first two Cape ivy insects in our quarantine, we will begin a lengthy investigation into their host specificity. We must be confident of the safety of any insect we seek to release to control Cape ivy. Several years of additional laboratory and field evaluations of their host range will be required. Then, if we still feel that the insect is safe, we will prepare a request for the release. Regulatory approval can easily take an year. Thus, it will probably be three to five more years before the first of these insects is released in California. In the meantime, we're assembling the test plants we will need for our host range tests. Many additional plant species are still needed (see accompanying article) and we hope that CalEPPC and CNPS members can assist us in obtaining some of those.

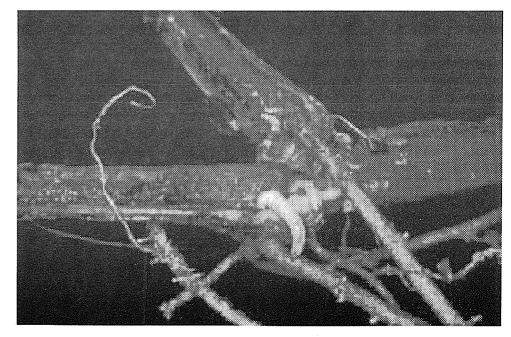
Test Plants Needed for Biocontrol of Cape Ivy Project

Joe Balciunas

We now have the first two candidates as possible biological control agents for Cape ivy in our quarantine containment facility in Albany, CA [see article this newsletter]. Prior to requesting release of these insects, we must first obtain compelling evidence that they are safe enough to release. We will do this primarily by evaluating the host range of each insect – the array of plant species that each insect will find acceptable for feeding and development.

Since herbivorous insects have close evolutionary ties to their host plant, we will concentrate our tests on the close relatives of Cape ivy, mainly the other members of the tribe *Senecioneae*, in the sunflower family *Asteraceae*. Here in Albany, we currently have only about a dozen of the 30-50 plant species that we are planning to evaluate [see Table for list of currently needed plants]. In order to speed up our evaluations, our South African colleagues will test these insects in parallel with us. However, they will concentrate on South African relatives of Cape ivy. We will test primarily California natives in the tribe *Senecioneae*, especially those growing along the coast, where they are most likely to be encountered by our insects, after they are released.

Any assistance in obtaining seeds and/or plants on this list will be greatly appreciated, and should help expedite the early release of these potential biological control agents for Cape ivy. Besides the various California Senecio species, we also need Blennosperma, Cacaliopsis, Crocidium, Lepidospartum, and Tetradymia. If necessary we will reimburse collectors for their expenses, or even meet them at the field site to assist in collecting the seeds/plants. Sites on private property are usually preferred, since obtaining the necessary permits to collect on public lands can be very time consuming. For further information please contact me at joe@pw.usda.gov or (510) 559-5975.



Acrolepia larvaeadult on

Senecioeae Species in California

- * introduced species
- · plants we desire for host-specificity testing
- ...some seedlings available, but more are required

Note: any other Senecio seeds would be welcome

Subtribe Senecioninae

Genus species Where found (Jepson) Delairea odorata* Shady ± disturbed places; <200m. Nco, Cco, SnFrB Erechtites glomerata* Woods near coast; <500m. NCo, NCoRO, CCo, SCoRO hieracifolia* Disturbed sites near coast; <500m. NCo, n CCo minima* Grassland, woodland, coastal scrub; gen <500m. NCo, NCoRO, CCo, SCoRO

Senecio aphanactis Drying alkaline flats; <400m. CW, SCo, ChI

Dry open foothill woodland, montane forest; <2500m. NW, CaR, SN (exc Teh), n CW aronicoides

Steep rocky slopes; 400-1500m. s SCoRO, TR astephanus bernardinus Pine forests; 1800-2300m. e SnBr

Sand dunes, coastal floodplains; <100m. s CCo blochmaniae bolanderi Wet cliffs, open forest; <200m. NCo

breweri Seasonally damp, protected woodlands; 200-1700m. s SNF, Teh, e SnJV, c&s CW, n WTR

californicus Coastal strand to shrubland; <1200m. s SN, Teh, CW, SW, w DSon canus High rocky plains, sagebrush scrub; 1300-3600m, e KR, CaR, SN, GB

> clarkianus Damp meadows; 1400-2700m, c&s SN clevelandii var. clevelandii

Drying serpentine soils, esp among shrubs; 400-900m. s NCoRI (Napa, Lake Cos.), c SNF (Tuolumne Co.) cymbalarioides Damp alpine meadows; 17003500m. s CaRH, n&c SNH, MP

elegans* Disturbed coastal habitats; <100m. CCo, SnFrB, SCo

eurycephalus var. lewisrosei Serpentine slopes, canyons; 550-900m. n SNH (Feather River drainage, e Butte, Plumas Cos.)

Dry, rocky or sandy sites; <2000m. CA-FP (exc NCo, KR), SNE, D flaccidus fremontii Talus, other rocky places 2600-3600m. CaRH, SN, SnBr, GB ganderi Chapparal, burns; 400-1200m. sw PR (sw San Diego Co.) greenei Dry, open serpentine in scrub or; 400-1500m. s KR, NCoR

hybridus* Damp, protected, disturbed sites; <100m. SnFrB hydrophiloides Damp meadows, hillsides; 1500-2800m. e CaRH, n SN, MP

hydrophilus Swamps, muddy sites, tolerant of standing saltwater; <2300m. s NCoR, CaR, SN, deltaic GV, n CW, GB

indecorus Meadows, streambanks in open woods; 1600-2000m. s MP (pine Creek, Lassen Co.)

integerrimus Grassland, open forest; 150-3600m. KR, NCoRI, CaR, SN (exc Teh), GB ionophyllus Dry rocky coniferous forest, granite crevices; 1500-2700m. s SN, SnGb, SnBr

jacobaea* Pastures, roadsides, disturbed places; <1500m. NCo, W KR, sw CaR, n SN, n ScV, SnFrB layneae Dry pine/oak woodland, on serpentine; 200-1000m. n SNF (El Dorado, Tuolumne Cos.) lyonii

Hillsides; <500m. s ChI (Santa Catalina, San Clemente islands)

macounii Rocky, disturbed streamsides, roadsides, clearings in coniferous forest; 400-900m. nw KR (Del Norte Co.)

mohavensis Sandy washes, flats; <1000m, D Rocky or sandy soils, sagebrush or open woodland; 1400-3200m. SNH (e slope), SNE. DMtns multilobatus

Talus slopes; 2900-3700m. c SNH, n SNE (Sweetwater Mtns.) pattersonensis

pauciflorus Subalpine or alpine meadows; 2400-3500m. SNH Streambanks, meadows; 2400-3300m. CaRH, SN, Rrn pseudaureus scorzonella Open forest, meadow edges; 1600-3500m. CaRH, SNH, n W&I

serra Damp, open coniferous forest or sagebrush scrub; 1300-3200m. s SNF, SNH (e slope)

Dry, open rocky places; 1800-3200m. SNH (e slope), SnBr, SNE, n DMtns spartioides streotanthifolius Woodlands, rocky areas, to alpine barrens; 900-3100m. CaR, SNH, MP sylvaticus* Open, disturbed woodland, rocky sites, \pm coastal; <200m. NCo, n CCO, SnFrB

triangularis Wet meadows, streambanks in open, coniferous forest; 100-3500m. KR, CaR, SN, SnGb, SnBr, PR, MP

vulgaris* Gardens, farmlands, other disturbed sites; <1500m. CA (exc D)

werneriaefolius Talus, open sites, among trees near timberline, in loose soil; 3000-4000m. n&c SNH, n W&I

Subtribe Blennospermatinae

Blennosperma bakeri Vernal pools, wet grasslands; <100m. NCoR, ne SnFrB (s Sonoma Co.)

nanum Grassland, scrub, woods, gen wet, open areas; <1600m. NCoR, SNF, GV, CW, SCo, ChI

Crocidium multicaule Snady soils, grassland, open woodland; gen <1500m. NCoR, SNF, e SnFrB, SCoR (very uncommon), MP

O 1 4 11	-		
Subtribe	Lucci	lonin:	$2 \wedge \alpha 2 \alpha$
SUUTING	ı uəəi	iaunic	10000

•	Cacaliopsis	nardosmia	Meadows, open forest, sometimes serpentine; 200-1900m. KR, NCoR
•	Lepidospartum	latisquanum	Sandy or gravelly pine/juniper woodlands, open scrubland; 1400-1500m. SnGb (n slope), W&I, DMtns
•		squamatum	Sandy or gravelly washes, stream terraces; <1800m. SNF, SCoRI, SW, D
60	Luina	hypoleuca	Rocky places, cliffs, sometimes on serpentine; <1200m. KR, NCoR, sw SnFrB
	Petasites	frigidus var. palmatus	Forests, gen wet soil; <400m. NW, nw&nc CW
•	Tetradymia	argyraea	Pinyon/juniper woodland; 1400-2100m. DMtns.
		axillaris	Sagebrush or saltbrush scrub; 1200-2300m. s SNE, DMoj
•		canescens	Sagebrush scrub, pinyon/juniper woodland, forest; (400) 1600-3300m. TR, s PR, GB, DMoj
•		comosa	Coastal scrub, chapparal, sagebrush scrub; 300-1500m. TR, PR
		glabrata	Sagebrush scrub, pinyon/juniper or Joshua-tree woodland; 800-2400m. GB; DMoj
		spinosa	Gen saltbrush scrub; 800-2400m. s MP, n SNE
		stenolepis	Joshua-tree woodland, creosote-bush scrub; 600-1500m. SNE, DMoj

Dunes, deep sand, sagebrush scrub; 1200-2100m. n SNE

Subtribe Senecioninae

tetrameres

Oubtile Contra		
 Senecio 	aphanactis	Drying alkaline flats; <400m. CW, SCo, Chl
•	astephanus	Steep rocky slopes; 400-1500m. s SCoRO, TR
•• bolanderi		Wet cliffs, open forest; <200m. NCo
• breweri Seasonally damp, protected woodlands; 200-17		Seasonally damp, protected woodlands; 200-1700m. s SNF, Teh, e SnJV, c&s CW, n WTR
•	californicus	Coastal strand to shrubland; <1200m. s SN, Teh, CW, SW, w DSon
••	ganderi	Chapparal, burns; 400-1200m. sw PR (sw San Diego Co.)
•	hydrophilus	Swamps, muddy sites, tolerant of standing saltwater; <2300m. s NCoR, CaR, SN, deltaic GV, n CW, GB
•	integerrimus	Grassland, open forest; 150-3600m. KR, NCoRI, CaR, SN (exc Teh), GB
00	jacobaea*	Pastures, roadsides, disturbed places; <1500m. NCo, W KR, sw CaR, n SN, n ScV, SnFrB
•	layneae	Dry pine/oak woodland, on serpentine; 200-1000m. n SNF (El Dorado, Tuolumne Cos.)
•	lyonii	Hillsides; <500m. s Chl (Santa Catalina, San Clemente islands)
••	triangularis	Wet meadows, streambanks in open, coniferous forest; 100-3500m. KR, CaR, SN, SnGb, SnBr, PR, MP
	•	

Subtribe Blennospermatinae

•	Blennosperma	bakeri	Vernal pools, wet grasslands; <100m. NCoH, ne ShFrB (s Sonoma Co.)	
•			Grassland, scrub, woods, gen wet, open areas; <1600m. NCoR, SNF, GV, CW, SCo, Chl	
	Crocidium	multicaule	Snady soils, grassland, open woodland; gen <1500m. NCoR, SNF, e SnFrB, SCoR (very uncommon), MI	כ

Subtribe Tussilaginaceae

•	Cacaliopsis	nardosmia	Meadows, open forest, sometimes serpentine; 200-1900m. KH, NCOH
٠	Lepidospartum	latisquanum	Sandy or gravelly pine/juniper woodlands, open scrubland; 1400-1500m. SnGb (n slope), W&I, DMtns
	, .	squamatum	Sandy or gravelly washes, stream terraces; <1800m. SNF, SCoRI, SW, D
00	Luina	hypoleuca	Rocky places, cliffs, sometimes on serpentine; <1200m. KR, NCoR, sw SnFrB
•	Tetradymia	argyraea	Pinyon/juniper woodland; 1400-2100m. DMtns.
•	 canescens Sagebrush scrub, pinyon/juniper woodland, forest; (400) 1600-3300m. TR, s PR, GB, DMoj 		

Coastal scrub, chapparal, sagebrush scrub; 300-1500m. TR, PR comosa

Cape Ivy Year 4 donors

We want to thank the following individuals and organizations for their donations and pledges to the Cape ivy biocontrol program. Many of those on the list have generously donated for this fund in past years.

USDA - BLM	2,900	SCV	500
Boz Wms	17,352	Friends of Los Penasquitos	500
JiJi Foundation	10,000	Tamalpais Conservation Club	1,000
CDPR	10,000	Temescal Canyon Associates	500
CNPS State	2,000	Strong Foundation	2,000
San Diego	1,000	Elizabeth Crispin	500
LA/SMM	1,000	Bob Soost	225
Yerba Buena	500	Ralph Waycott	100
South Coast	100	Winston Salser	10,000
East Bay	1,000	Jean Conner	1,000
Monterey Bay	1,025	Total	62,702

Symposium 2001

Mark your calendars for Oct. 5-7 when CalEPPC will hold its 10th Anniversary Symposium at the Handlery Hotel in San Diego. While plans are still in flux as to the exact program, we will have an entire sessiond devoted to desert weed issues. Three field trips are already in the planning. Our next newsletter will have details, as will the web site. In addition, we will mail the usual program announcement and registration form to all members.

Plant of Potential Concern

Asparagus asparagoides

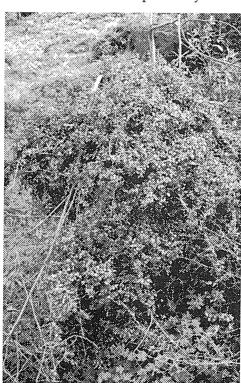
Jesse Giessow

Asparagus asparagoides (bridal creeper, smilax, asparagus vine) is a native of South Africa that is highly invasive in Mediterranean climate areas of Australia and is of potential concern in southern California. Bridal creeper is a member of the Liliaceae family (or Asparagaceae) and was formerly in the genus Myrsiphyllum. It is a perennial climber or scrambler with long wiry stems and rhizomatous roots. Most populations attain heights up to 3 meters in California, although infestations in Australia climb high into tree canopy (Landcare Notes, State of Victoria). The rhizomes produce numerous fleshy tubers which become entwined together and can form a dense mass 5 to 10 cm deep in the soil. It's estimated that over 85% of the plant's biomass is underground. What appear to be leaves are actualcladodes (leaf-like modified stems). The true leaves are small. bract-like scales at the base of the cladodes. The cladodes are glossy light green, 1-7 cm long and 4-30 cm wide, stalkless, broad at the base and narrowing to a pointed tip, with parallel veination, and are arranged alternately on the stem. The sweetly scented flowers are borne singly or in pairs on stalks growing from the cladode axil. There are 6 white to pale green petals and sepals and 6 orange stamens. The fruit is a round berry (6-10 mm diameter) that is green when immature, turning red and sticky when mature. There are 1 to 9 small (2-4 mm dia.) black shiny seeds per fruit. The seed is viable in Australia and is believed to be viable in California.

Photographs of asparagus vine can be viewed at http://smslrwma.org and at the web site listed below for the State of Victoria.

Recent sightings of Asparagus

asparagoides in riparian habitats of San Diego County has prompted the publication of this article. Based on information and observations of several individuals, the plant appears to be becoming more abundant. It seems to be localized in distribution, but within these areas it is spreading. While this species may remain localized, being more of a waif than a pest, it may at some point reach a critical mass where it begins to spread more rapidly. Because the seed is viable and spread by birds



Asparagus asparagoides on willow.

and other wildlife (as reported in Australia), as the seed pool gets bigger the number of new plant colonizations will probably increase. The plant may also spread during flood events when rhizomatous roots are dispersed downstream.

The author has observed this plant in two different watersheds in northern San Diego County. The plant is present at several different

sites within these locations, and has spread along the ground and climbed up native vegetation, including willow trees. This plant is also present in Mission Valley Preserve where it is definitely spreading, albeit slowly, in the lower San Diego River (Mike Kelly, Conservation Chair of the Friends of the Mission Valley Preserve, pers. comm.). Asparagus vine appears to be more of a potential problem in wet areas with warm weather. Coastal riparian areas in southern California appear to be the habitat most likely to be invaded.

The invasiveness of this species in Australia indicates that it is potentially problematic here in California. It was introduced in the State of Victoria in 1886, and within 50 years it was naturalized within many parts of Australia. This species is particularly problematic in Australia because it is able to invade pristine native habitat due to the spread of seed by birds. It has invaded a wide variety of habitats, growing over shrubs and trees, and smothering understory vegetation with its canopy and rhizome mat. The infestations of bridal creeper in parts of Australia look like Cape ivy infestations. Organizations have formed specifically to address this exotic plant in Australia, indicating the size and scope of the problem. While California may not have enough warm wet habitat to make is a widespread threat (F. Hrusa, CA Dept of Food and Agriculture, pers. comm.), we believe that it is important to keep an eye on this species.

Control of this plant must address the underground biomass. Removal of the above ground biomass will reduce the growth of the plant,

Special Offer Continued — \$5 Off Invasive Plants of California's Wildlands

edited by: Carla C. Bossard, John M. Randall, & Marc C. Hoshovsky

360 pp., 7 x 10, 133 color photos, 76 line illust., 79 maps / Published by UC Press Paperback. ISBN 0-520-22547-3 / Common name index shipped with book

	Order Form (Plea	se print)	
	order form to: KW Publications, POB 26455, San Die	-	
858-27	71-1425 or email mkellysd@aol.com. Profits from each	n book sold go to CalEl	PPC. MC / Visa excepted
Qty.			
	Invasive Plants of California's Wildlands at \$24.95 each	(\$29.95 less \$5 off = \$2	24.95).
	Sales tax for California residents: \$1.87 for each bool	κ.	
	Shipping and handling, \$5.00 for first book, \$2.00 ea	ch additional book.	
	\$ Total for order, including sales tax and shipping		
Name	Org		P.O
Street	City	State	Zip
Phone	e Email		
Visa, N	MasterCard. Card #:	Exp. date	(month/year):/
Name	as it appears on card (if different from above):		

(Asparagus continued)

but regeneration from the rhizomes will occur. Chemical control using glyphosate herbicide is best done when the plant is actively growing in summer or fall. The above ground material should be pulled off native vegetation and sprayed on the ground away from desirable plants. Several follow-up treatments are probably required given the presence of rhizomes and tubers.

If anyone has seen this plant it would be much appreciated if you could share this information with:

Jesse Giessow, (760) 943-6924. igiessow@home.com,

Landcare Notes, Notres Series No PP0088, July 1999, Dept of Natural Resources and Environment, State of

ources and Environment, State of Victoria, Australia. Web page: http://www.nre.vic.gov.au/web/root/domino/infseries/infsheet.nsf/1307fdca9f455dac4a25653200176a4b/8c3f49646d6be4154a2567ee001d1a28?OpenDocument

Call for Nominations

It's that time of the year for nominating candidates for Ca-IEPPC. Officers are elected annually and include the President, Vice-president, Secretary, and Treasurer. Five (5) Board of Director positions, each for a two year term will be open (see p.2 for a list of current officers and board members.

Candidates must be current, upto-date members of CalEPPC. Be sure to contact that person to see if they are willing to accept the nomination and provide us with their full Name, address, phone & fax numbers and email address. Nominations must be sent by mail or email to our Secretary, Ramona Robison by June 15, 2001 at:

2206 K St., Ste 5A Sacramento CA 95816 rarobison@ucdavis.edu

Saharan Mustard Working Group

Fed up with Saharan mustard, a.k.a. Moroccan mustard, Asian mustard (*Brassica tournefortii*)? So is Jim Dice. If you want to join Jim in doing something about this horrific weed exploding in our deserts and dunes contact him and help form this new working group:

Jim Dice Senior Resource Ecologist California State Parks Colorado Desert District 200 Palm Canyon Drive Borrego Springs, CA 92004-5005 (760) 767-3074 (760) 767-3427 - fax idice@statepark.org

Exotic Pest Plants, Calif. Assoc. Nurserymen, and CalEPPC

Carl E. Bell, California Exotic Pest Plant Council Mike Evans, Tree of Life Nursery Cheryl Wilen, UC Cooperative Extension

[Editor's note: since its inception CalEPPC has attempted to carry on a collegial discussion with the California Association of Nurserymen (CAN) over the issue of exotic pest plants. Here is a recent article submitted to CAN. See the companion article on Noxious Weed Listing for how you can help.]

What is an exotic pest plant?

An exotic pest plant is a weed, but a weed of natural areas, not of agriculture, nurseries, or landscapes. These plants are a problem throughout the state because they invade natural ecosystems such as creeks, rivers, estuaries, meadows, and hillsides. By taking over significant amounts of land, they displace native plants, which in turn eliminates or degrades habitats for birds and other wildlife. Environmental scientists now recognize these weedy pests as the second most important impact on biological diversity after habitat destruction. National attention was brought to this problem when President Clinton issued an Executive Order on Invasive Alien Species in February 1999 directing all federal agencies to coordinate their activities to combat exotic pests. Numerous public and private groups are waging war against these weeds all over California, some very successfully, but many are doing well to hold the weed in check.

Of the several hundred invasive species that are recognized as impacting natural areas of California, many are weeds in a classical sense. These plants came into the US from Europe or Asia as contaminants in crop seed or hay. Yellow starthistle

(Centaurea solstialis), for example, one of the most widespread of these weeds, came from Russia in the 19th century in alfalfa hay. Others, however, were intentionally introduced into California for commercial reasons. These include giant reed (Arundo donax), Brazilian pepper (Schinus terebinthifolius), salt cedar (Tamarix ramosissima), and pampas grass (Cortaderia selloana).

Who is CalEPPC?

The California Exotic Pest Plant Council (CalEPPC for short) was formed about 9 years ago following a format established by the first EPPC in Florida. This organization now has over 800 members, consisting of private volunteers, public agency professionals, and scientists. The basic mission of CalEPPC is to educate the general public about this issue, to influence public policy on exotic pests, and to provide a way for interested parties to network. The term exotic pest plant is preferred in order to maintain the distinction between weeds of natural areas and agricultural or ornamental weeds. For more information on CalEPPC, see their website at www.caleppc.org.

What is CAN's role in this?

CAN and its members can partner with CalEPPC to avoid future introductions of invasive species. Actions include efforts to stop the sale of known invasive species such as pampasgrass or giant reed, especially in sensitive areas of the state. They also include changes and new awareness of in the nursery trade on the potential of some plants to be invasive. And, because of the heavy volume of public contacts at retail nurseries and garden centers, CAN members are a great educational resource on invasive species. Let's look into each of these three actions separately.

Pampasgrass along the coast, German ivy (Senecio mikanoides) (which has been renamed cape ivy, Delarirea odorata) in the San Francisco Bay area, edible fig (Ficus carica) in the central valley, and salt cedar in the desert are all examples of plants that are a major invasive problem in the listed regions of the state but of lesser concern in other areas. CAN is working on a program with CalEPPC to identify which ornamentals are most problematic in different regions of California. When this program is put into place, wholesale and retail nurseries will be encouraged to remove listed plants from their inventories.

Pampasgrass is a good example of how important it is for the nursery trade, especially the wholesale growers, to thoroughly know the biology of the species they produce. Pampasgrass is dioecious, meaning plants are either male or female. Propagating only female plants, which have the showiest flowers, by division will avoid producing viable seed that can get into the natural environment. The so-called 'dwarf pampasgrass', is actually jubatagrass (Cortaderia jubata) a species with female flowers that are self-fertile. Jubatagrass produces viable seed and is very invasive pampasgrass in coastal locations in central and northern California.

Oleander (*Nerium oleander*) is another case in point. There are locations in the foothills around San Continued on p. 10

(Calif. Assoc. Nurserymen cont'd)

Bernardino that are being invaded by oleander. In its native range in the Mediterranean, it is common on hillsides with the same type of climate as southern California. This plant, however, has been grown for decades in California without being considered invasive. If you observe oleanders in nurseries or landscapes, you will notice that while most do not produce seed, some do. So, the potential for oleander to be an invasive species has always been present as long as seed producing plants are propagated, but it did not become a problem until recently. Biologists do not know why a plant like oleander will become invasive after years of being troublefree, but it is a known phenomenon. Growers of ornamental species should be aware of the reproductive habits of the plant they produce and take note of species that produce a lot of seed. This is especially important when new species are introduced into the nursery trade.

This also applies to vegetatively propagated plants. Ease of propagation by stolon or runner is often a desirable characteristic in a nursery, but this can also translate into invasiveness. German ivy is a terrible example of how an easy to grow hanging plant has gotten to be a major exotic pest plant problem in the cool coastal woodlands of the SF Bay area without producing a single seed.

It is impossible to accurately predict which plants sold by nurseries in California, or that come in by mail order from out of state, are going to invade California's dwindling natural landscapes. But, the nursery trade, represented by CAN, has an equally important role to play in trying to reduce the impact of these plants by helping educate the public on this issue. In the fall, CAN will start a statewide campaign, called "Keep it in the garden" which identifies problematic species and what the nurseries and the general public can do to help. Watch for the educational materials and join the fight.

California Weed Research Grants

The California Dept. of Food and Agriculture (CDFA) is requesting research proposals from qualified public and private research entities to perform research on the biology, ecology, or management of noxious and invasive weeds in accordance with Senate Bill 1740 (Sept. 2000). Proposed research projects must be needs-based, applied and practical. Proposals must be received at the CDFA Contracts Office no later than 3:00 PM on May 22, 2001 (postmarked proposals will not be accepted).

Four research priority areas were selected from responses to a survey conducted with the California Interagency Noxious Weed Coordinating Committee and priorities highlighted in a Weed Science Society of America Research Report entitled, "Future Research Directions for Weed Science." Research priority areas include:

- (1) Impacts: Economic Analysis/Assessment and Ecological Impacts
- (2) Integrated Weed Management: Refined Tools and Technology
- (3) Restoration and Revegetation
- (4) Other/ General category

To receive a copy of the general specifications and proposal format and content requirements (officially referred to as the: Notice of Funds Available for Research Grant Projects, NOFA #01-0005) contact Jan Howard, CDFA Contract Analyst via email, jhoward@cdfa.ca.gov or fax, (916) 654-0395.

New Members

We welcome the following new members.

members. Aquatic Outreach Greg Archbald Shelly Feeney Austin Margaret Baumgratz Aimee Betts Karen Brown Bureau of Land Management, Portland **Edward Burton** California Dept. of Parks & Recreation, Livermore Paul Caron David Chang Wesley Colvin III Roger Cook County of San Luis Obispo Ag. Commisioner Katrina Dlugosch Sue Donaldson Rod Dossey Dow AgroScience Suzanne Ferroggiaro Larry Ford Linda Fries Nathan Gale Ronnie Glick Paul Grunland **Ieff Halstead** JoEllen Kassebaum Jason Lopez Marnie McKernan **Bob Melendez** Keven Moore **Bob Muns** Adelina Muñoz Elizabeth Rush Susan Sanders San Joanquin River Parkways Rudolf Schmid Larry Serpa Marie Sullivan H.C. Thurman UC Berkeley Botanical Garden Library Denise VanKeuren Phoebe Watts

Dolores Welty

Inez Yoder

Randy Zebell

Richard Weston

Noxious Weed Listing at Critical Point

Mike Kelly, president

We need your help to ensure that *Cortaderia selloana* (pampasgrass) is placed on the State's Noxious Weed List.. In 1992, the Legislature passed AB1108, a bill authorizing the placement of wildland, i.e., non agricultural weeds on this list. It's taken almost 10 years, but the California Dept. of Food and Agriculture has sent a list of weeds they recommend putting on this list. See Jake Sigg's letter for this list.

The problem is that the California Association of Nurserymen (CAN) has written in opposition to placing pampasgrass on the list. They consider it economically important to segments of their industry. In fact, they would be happy to see the entire list go away — because of the precedent it sets — but realize some listing is now inevitable.

Please take the time to write a quick letter or fax to Secretary of Agriculture William Lyons at the address on Jake's letter.

In southern California Cortaderia selloana is well on its way to becoming as big a problem as Cortaderia jubata (Jubata grass) is in central and northern coastal California. For every pampasgrass sold in a nursery in southern California, somebody eventually will have to pay good money to eradicate 10 or 100 of its offspring. In San Diego, where I live, natural lands managers are spending tens of thousands of dollars to eradicate this weed. In Rose Canyon Natural Park alone, more than 10,000 pampasgrass were sprayed with herbicide in a costly control effort. The plant was popular with new homeowners during the building boom beginning in the 1970s. If the nursery industry had

CALIFORNIA NATIVE PLANT SOCIETY

338 Ortega Street, San Francisco, California 94122

7 April 2001

William Lyons Jr, Secretary California Department of Food and Agriculture 1220 N Street Sacramento, California 95814

Dear Secretary Lyons:

The California Native Plant Society (CNPS) is concerned about the degradation of our landscape caused by aggressive exotic weeds. We have been interested in effectuating AB 1108, passed by the California Legislature in August 1992, by listing some of these as Noxious Weeds. The Department of Food and Agriculture has made an excellent start by proposing that the following be listed:

Spartium junceum
Cortaderia selloana
Cortaderia jubata
Ailanthus altissima
Arundo donax
Tamarix - all spp except

Spanish broom
pampas grass
pampas grass, jubata grass
tree of heaven
arundo, giant reed

T. aphylla tamarisk, saltcedar
Eichhornia crassipes water hyacinth
Centaurea melitensis tocalote
Egeria densa Brazilian waterweed

Delairea odorata Cape ivy
Cirsium vulgare bull thistle

On the contentious issue of *Cortaderia selloana*, we note that, whereas it was formerly believed to be well-behaved, we now know that that is not the case. Since the plant is dioecious, it could be that the two sexes did not formerly come into contact. Now they have, and the species is causing extensive damage to wildlands, rangelands, logged areas, and recreational areas. CNPS cooperated with the California Exotic Pest Plant Council in a privately-financed \$275,000 study of pampas grass conducted by the latter organization.

We urge CDFA to adopt the entire list as proposed. Thank you for taking the lead on this vital issue.

Sincerely,

Jacob Sigg, Chair Invasive Exotics Committee

stuck to selling just the showier female plants produced through root division, we might not have the problem we do today. But, as demand soared, some in the trade, probably newcomers in the booming market, took the less costly shortcut of growing it from seed and began selling both sexes to the outside world. The result was an explosion out of the garden and into riparian bottomlands and grasslands.

CAN should be helping to fix the problem caused by their industry, not blocking solutions to it.

2001 CalEPPC Membership Form

If you would like to join CalEPPC, please remit your calendar dues using the form provided below. All members will receive the CalEPPC newsletter, be eligible to join CalEPPC working groups, be invited to the annual symposium and participate in selecting future board members. Your personal involvement and financial support are the keys to success. Additional contributions by present members are welcomed!

Low Income* \$15 N/A Regular 30 Regular \$100 Family 40 Contributing 250	Name	
☐ Contributing 50 ☐ Patron 500 ☐ Sustaining 100 ☐ Sustaining 1000	Affiliation	
☐ Lifetime 1000 * Includes students	Address	
Please make an additional contribution in my name to:	City/ State/ Zip	
Student/Low Income membership \$		
Cape Ivy Biocontrol Fund \$	Office Phone	Home Phone
Please make your check payable to CalEPPC and mail with this application form to:	Fax	email
CalEPPC Membership c/o Sally Davis 32912 Calle del Tesoro San Juan Capistrano, CA 92675-4227	*Students, please inclu	ide current registration and/or class schedule



32912 Calle del Tesoro San Juan Capistrano CA 92675-4227

ADDRESS SERVICE REQUESTED

NON-PROFIT ORG. U.S. POSTAGE PAID MISSION VIEJO, CA PERMIT NO. 1117

