Features

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The objective of the study was to evaluate the efficacy of insecticides for control of aphids on cauliflower under desert growing conditions. Cauliflower (Symphony) plants were transplanted into double row beds on 40 inch centers 1 Nov 2012 at the University of California Desert Research and Extension Center, El Centro, CA. Stand establishment was achieved using overhead sprinkler irrigation; and furrow irrigation was utilized thereafter. Plots were four beds 13.3 ft wide by 40 ft long and bordered by one untreated bed. Included were four foliar insecticide spray treatments and an untreated check in a randomized complete block design experiments with five replicates. Insecticidal compounds, formulations, and application rates are provided in the tables. Insecticide treatments were applied on 6 Feb 2013. Foliar sprays were applied using a Lee Spider Spray Trac tractor with a spray boom that included three TJ-60 11003VS nozzles per bed, covering four beds (twelve nozzles on the boom) applying 53 gpa at 30 psi. Alate (winged) aphids and apterous (wingless) aphids were counted on ten random plants in each plot on each sampling date listed in the tables. There were two aphid species present; mostly green peach aphid, *Myzus persicae* and a few cabbage aphid, *Brevicoryne brassicae* colonies were detected. Therefore, the two aphid species were not separated, but pooled for statistical analysis.

There were no differences among the treatments for alate aphids on any of the sampling dates, but the post treatment alate aphid averages for each of the insecticide treatments were significantly lower than the alate aphid average for the untreated check (Table 1). There were no differences among the treatment means for apterous aphids for the pre-treatment sample on 6 Feb or 5DAA on 11 Feb (Table 2). All insecticides treatments except Sivanto had fewer apterous aphids compared to the check 8DAA on 14 Feb and all insecticide treatment had significantly fewer apterous aphids than the check 14DAA on 20 Feb and for the post treatment averages. No phytotoxicity symptoms were observed following any of the insecticide treatments. This research was supported by industry gifts.
Table 1.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Fl oz/acre</th>
<th>PT 6 Feb</th>
<th>5 DAA</th>
<th>11 Feb</th>
<th>8 DAA</th>
<th>14 DAA</th>
<th>20 Feb</th>
<th>PTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closer GF–2032 SC</td>
<td>1.5</td>
<td>46.80 a</td>
<td>13.00 a</td>
<td>6.60 a</td>
<td>5.40 a</td>
<td>8.33 b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closer GF–2032 SC</td>
<td>2.0</td>
<td>12.60 a</td>
<td>10.20 a</td>
<td>14.80 a</td>
<td>2.80 a</td>
<td>9.27 b</td>
<td></td>
<td></td>
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<tr>
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<td>16.60 a</td>
<td>7.20 a</td>
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<td>9.53 b</td>
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</tr>
<tr>
<td>Movento</td>
<td>5.00</td>
<td>21.80 a</td>
<td>11.00 a</td>
<td>12.00 a</td>
<td>3.40 a</td>
<td>8.80 b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check</td>
<td>-----------</td>
<td>19.40 a</td>
<td>26.60 a</td>
<td>26.20 a</td>
<td>4.60 a</td>
<td>19.13 a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PT = pretreatment; DAA = Days after application; PTA is the post treatment average.

Means within columns followed by the same letter are not significantly different; LSD, P＞0.05.

Table 2.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Fl oz/acre</th>
<th>PT 6 Feb</th>
<th>5 DAA</th>
<th>8 DAA</th>
<th>14 DAA</th>
<th>20 Feb</th>
<th>PTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closer GF–2032 SC</td>
<td>1.5</td>
<td>7.60 a</td>
<td>20.40 a</td>
<td>17.20 bc</td>
<td>16.40 b</td>
<td>18.00 b</td>
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<td>Closer GF–2032 SC</td>
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<td>70.20 a</td>
<td>11.80 bc</td>
<td>10.00 b</td>
<td>30.67 b</td>
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<tr>
<td>Sivanto</td>
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<td>33.40 a</td>
<td>38.20 ab</td>
<td>16.80 b</td>
<td>29.47 b</td>
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<tr>
<td>Movento</td>
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<td>9.00 b</td>
<td>9.67 b</td>
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<td>-----------</td>
<td>23.40 a</td>
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<td>76.60 a</td>
<td>59.80 a</td>
<td>68.33 a</td>
<td></td>
</tr>
</tbody>
</table>

PT = pretreatment; DAA = Days after application; PTA is the post treatment average.

Means within columns followed by the same letter are not significantly different; LSD, P＞0.05.

\(z\) Log\(_{10}\) transformed data used for analysis but actual means shown.
Agricultural Burn and Alternative Uses
Oli Bachie, PhD

Abstract

Crop residue is defined as any vegetative material remaining in the field after crop harvest. The term crop residue burning (CRB) or agricultural burn is designed to enable growers to burn crop residues under certain conditions. Growers burn crop residues for some recognizable advantages and that it is a cheap and quick way of disposing “wastage”. To the public and the air quality, a “smoke up in the sky” is not only a nuisance, but also visibility impairment, environmental and potential “health” risk. The agricultural experts feel the challenges posed from the growers perspective, but do not generally encourage crop residue burning. To the Agricultural expert, crop residues are not actually a “waste”, but a useful natural resource that can still be utilized for many alternative purposes. Crop residues can be left in the field (in what is called conservation tillage) and be used to suppress weeds, enhance soil and subsequent crop productivity. Furthermore, they can be collected and used to generate energy. Utilizing, crop residues rather than burning could generate additional income, sequester C and help mitigate climate change. Minimizing or eliminating crop residue burn through alternative uses require an interdisciplinary effort in exploring interconnections between farming, the environment and health concerns. Furthermore, the intended alternative technologies must be adoptable, economically feasible and socially acceptable.

Note: Abstract of a talk presented on the 5th Annual Imperial Valley Environmental Health Leadership Summit, November 2, 2013. Imperial, California
Demonstration of Robotic Thinning of Lettuce
Field day- Holtville, CA

When: Thursday November 14, 2013 (8:00 AM to 9:15 AM)

Where: Commercial lettuce field in Holtville
Exact location of the demonstration field will be determined two days before the workshop. Please contact the Cooperative Extension by phone (760-352-9474), email (kmbali@ucanr.edu) or visit our site http://ceimperial.ucanr.edu for the exact location two days before the workshop.

Tentative Agenda
8:00 AM Registration
9:00 AM Q&A
9:15 AM Adjourn

For additional information on the field day please contact Khaled Bali, kmbali@ucanr.edu or 760-352-9474.

Se Habla Espanol- Translation to Spanish is available, please contact us for details

Please feel free to contact us if you need special accommodations.

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The University of California
Cooperative Extension
Imperial County

presents

**The 24th Annual**
**Fall Desert Crops Workshop**

House of Steaks  215 N. Imperial Avenue  El Centro, CA

Date:  December 5, 2013  
Time:  7:00 a.m. to Noon

Sponsored by: Western Farm Press and Commercial Suppliers

**LUNCH PROVIDED FOR THOSE WHO RSVP TO: (760) 352-9474 OR EMAIL: ATIETZ@UCANR.EDU** IN ADVANCE. NO LATER THAN 12/3/2013 PLEASE!
AGRITOURISM INTENSIVE:

A class for Riverside region farmers and ranchers
offered by UC Cooperative Extension Riverside County, the UC Small Farm Program, Riverside County Farm Bureau, and other local partners

Are you considering agritourism or nature tourism on your farm or ranch? Would you like to build your agritourism or nature tourism business?

This class is for you!

- Local agritourism operators will share their own experiences and will be part of a supportive network of advisors as class participants plan and start new enterprises.
- Participants will learn from experts in business planning, regulatory compliance, risk management, hospitality and cost-effective marketing, including social media.
- The hands-on, interactive activities will guide participants as they assess their own farms or ranches for agritourism potential and start their own business, risk management and marketing plans.
- Each participant will receive a free copy of the extensive handbook, “Agritourism and Nature Tourism in California”, which will be used as a text for the class.

Registration is open – Sign up today

Riverside, San Diego, San Bernardino, Orange and Imperial County farmers and ranchers are welcome to sign up for the 3-session course. Register now at http://ucanr.edu/agtourriverside13

Times: 9:00 a.m. – 3:00 p.m. each session (lunch provided)
Location: Western Municipal Water District, 14205 Meridian Parkway, Riverside, CA 92518
Cost: $40 for 3-session course – Space is limited, please register early
Information: Penny Leff, UC Small Farm Program, paleff@ucdavis.edu, 530-752-7779

This material is based upon work supported by USDA/NIFA under Award Number 2012-49200-20030.
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IMPERIAL COUNTY
VEGETABLE CROPS
2013

University of California
Agriculture and Natural Resources

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1050 E. Holton Road
Holtville, CA 92250
Telephone: (760) 352-9474
Fax: (760) 352-0846
http://ces.fass.uc.edu
CIMIS REPORT AND UC DROUGHT MANAGEMENT PUBLICATIONS

Khaled Bali and Sharon Sparks*

California Irrigation Management Information System (CIMIS) is a statewide network operated by California Department of Water Resources. Estimates of the daily reference evapotranspiration ($ET_o$) for the period of November 1 to January 31 for three locations in the Imperial County are presented in Table 1. ET of a particular crop can be estimated by multiplying $ET_o$ by crop coefficients. For more information about ET and crop coefficients, contact the UC Imperial County Cooperative Extension Office (352-9474) or the IID, Irrigation Management Unit (339-9082). Please feel free to call us if you need additional weather information, or check the latest weather data on the worldwide web (visit http://tmdl.ucdavis.edu and click on the CIMIS link).

<table>
<thead>
<tr>
<th>Station</th>
<th>November</th>
<th>December</th>
<th>January</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-15</td>
<td>16-30</td>
<td>1-15</td>
</tr>
<tr>
<td>Calipatria</td>
<td>0.14</td>
<td>0.10</td>
<td>0.07</td>
</tr>
<tr>
<td>El Centro (Seeley)</td>
<td>0.13</td>
<td>0.09</td>
<td>0.06</td>
</tr>
<tr>
<td>Holtville (Meloland)</td>
<td>0.13</td>
<td>0.10</td>
<td>0.06</td>
</tr>
</tbody>
</table>

*Imperial Irrigation District.

Link to UC Drought Management Publications

http://ucmanageddrought.ucdavis.edu/

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