Contents

APRIL-JUNE 2018 • VOLUME 72, NUMBER 2

News and opinion

OUTLOOK

100 The race in the fields: Imports, machines and migrants

Martin

Four ways farmers are responding to the tightening labor market.

RESEARCH NEWS

102 Next-generation mechanization

Downing

New advances in image-recognition technology and robotics are reducing the need for manual labor — and potentially herbicides as well.

105 Research highlights

Downing

Briefs of recent AES and UCCE research papers on tree mortality, sugary drinks, mountain runoff and wild bees.

Corrections

Corrections to the January-March 2018 special issue:

The map of groundwater basins on the cover and page 5 omitted medium-priority basins in the northern Sacramento Valley and Sacramento Delta. The corrected map can be found at http:// calag.ucanr.edu/archive/?issue=72_1.

On page 29, in an introductory paragraph about the provisions of the Sustainable Groundwater Management Act (SGMA), the article "How are Western water districts managing groundwater basins?" incorrectly states that the law applies to groundwater sustainability agencies in low-priority basins. SGMA only applies to high- and medium-priority basins. The corrected text can be found at http://calag.ucanr.edu/ archive/?article=ca.2018a0004.



Research and review articles

107 Employment and earnings of California farmworkers in 2015

Martin et al.

A review of wage data from agricultural employers suggests that most California farmworkers were employed for less than a full year in 2015.

114 Automated lettuce thinners reduce labor requirements and increase speed of thinning

Mosqueda et al.

Automated thinners were as accurate in thinning lettuce as manual thinning, produced comparable yields, and were more than three times faster than thinning crews.

120 Wild pigs breach farm fence through harvest time in southern San Joaquin Valley

Camera traps recorded 860 wild pig encounters at Laval Farms during the harvest season for grapes and pistachio, most of them at night.

127 Central Coast growers' trust in water quality regulatory process needs rebuilding

Drevno

A 2015 survey of growers showed their trust of the regional water board had decreased since 2006, even though there had been more frequent communication.

135 Teens-as-teachers nutrition program increases interest in science among schoolchildren and fosters self-efficacy in teens

Bolshakova et al.

An after-school nutrition program increased children's preferences for gardening, cooking and science, and teen teachers reported an increase in health self-efficacy.