

Biomass fuels California power plants

The July–September 2011 online article on switchgrass (“Switchgrass is a promising, high-yielding crop for California biofuel” by Pedrosa et al.; see page E168) correctly notes that demand for ethanol in California is expected to increase in the future. A related blog post (<http://ucanr.org/blogs/blogcore/postdetail.cfm?postnum=5487>) discussed some of the policy drivers behind the desire to increase the production and use of cellulosic ethanol. The article implied that there are significant technical, economic and logistical challenges in converting ligno-cellulosic feedstocks such as switchgrass into ethanol at a commercial scale.

However, California already has a well-developed biomass-to-energy industry based on proven and deployed technology. California has approximately 30 operational biomass-to-electricity facilities, the most of any state, with 600 to 650 megawatts of capacity. Electricity from biomass comprises approximately 2% of the electricity used in California. The industry provides a disposal option for urban waste wood; woody biomass from fuels reduction and forest restoration;

and agricultural residuals such as orchard removals, trimmings and nutshells.

The industry is currently in a state of flux due to differing power sales contracts and the fact that wider environmental benefits are not accounted for in the price of electricity. A 1999 National Renewable Energy Laboratory study put the value for the environmental services provided by biomass-to-electricity at 10 cents per kilowatt hour.

Developing new forms of bioenergy for the future is important, but society and decisionmakers should also understand and value the benefits delivered by the existing industry. To see current biomass power plants in California, go to: <http://ucanr.org/BiomassPower>.

Gareth J. Mayhead
Woody Biomass Technology and Marketing
Center for Forestry, UC Berkeley



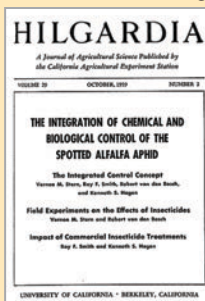
In Fairhaven, a biomass plant converts wood chips into electricity.

Gareth J. Mayhead

Hilgardia scanning, Web posting to begin with \$21,500 in donations

The *Hilgardia* Project, launched in April to bring the full text of the classic UC Agriculture and Natural Resources publication to the Internet, has received \$21,500 in donations and pledges, allowing the first phase to begin.

Hilgardia was the primary technical publication of UC ANR for 70 years. Although production ceased in 1995, *Hilgardia* editions include classic



Hilgardia journal
October 1959

research that is still widely cited in scientific literature, and many are considered cornerstones of current agricultural, environmental and nutritional research.

Despite its scientific pre-eminence, *Hilgardia* journals have virtually no Web presence today, and one-half of published issues (including all articles in the first 24 volumes, and 58 others) are out

of print. The remaining paperbound editions are subject to physical degradation.

UC faculty and staff are spearheading the effort to scan and digitize the series, all 967 articles and more than 31,000 pages. With donations and pledges, the *Hilgardia* Advisory Committee has reached two-thirds of their \$30,000 goal.

The first phase will include scanning of the Grape and Wine Collection (67 *Hilgardias* published between 1925 and 1982) on subjects spanning wine-grape physiology, anatomical structure, favorable soil characteristics, sensory and chemical evaluation, and management of pests and diseases.

“Targeted support for this initial collection came from the Lodi Winegrape Commission in acknowledgement of the tremendous importance of the monographs to the wine and grape industry today,” said Deborah Golino, committee chair.

Each article will be posted as a high-resolution PDF with searchable text, and its essential headings (such as title, authors, abstracts and references with active links) will be posted in HTML.

As they are digitized, *Hilgardia* editions will be posted on a separate section of the website of *California Agriculture*, which for decades was the sister publication to *Hilgardia*. Through the search engines and databases that now index *California Agriculture*, *Hilgardia* will become fully discoverable and searchable on the Web. All articles will be freely available and accessible to scholarly and lay readers worldwide.

To make a donation or for more info, write to calag@ucdavis.edu, e-mail Deborah Golino at dagolino@ucdavis.edu, or go to <http://californiaagriculture.ucanr.org/hilgardia.cfm>.
— Janet White