

P.I. NEWS

The Pistachio Industry Newsletter • Volume 3 • December 2014

PISTACHIO UP ON SEASONAL DEMAND

Pistachio prices rose up to Rs 15 per kg in the Indian capital today on the back of increased buying by retailers and stockists driven by winter season demand amid fall in supplies from overseas markets.

Prices of pistachio hairati and peshwari gained up to Rs 15 to conclude at Rs 1,360-1,400 and Rs 1,500-1,550 per kg, respectively.

Marketmen said increased offtake by retailers and stockists to meet seasonal demand mainly pushed up pistachio prices on the dry fruit market here.

**Press Trust of India, New Delhi,
December 18th 2014**

IRAN EXPORTS \$954M PISTACHIOS IN EIGHT MONTHS



ISNA/PHOTO: Safa Daneshvar

Source: Tehran Times (photos by ISNA)

Iran exported \$954 million of pistachio in the first eight months of the current Iranian calendar year, which began on March 21, a 67 percent rise compared to the same period last year, the Fars news agency reported on Monday.

Iran exported \$5.2 billion of food and agricultural products and imported \$13.2

billion of the products in the previous Iranian calendar year, which ended on March 20, 2014, according to the Iranian Customs Administration statistics.

Food and agricultural trade accounted for 20.2 percent of the country's total non-oil trade in the past Iranian calendar year.

Pistachio Growers Association Inc.

27 Ludgate Hill Road
Aldgate SA 5154

T: 0417 809 172

pgai.com.au



Pistachio Growers' Association



Horticulture Australia



TREES FOR SALE

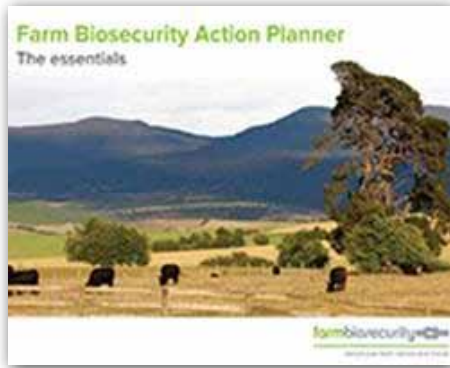
54 trees - 5 male, 49 female - bought from Sunraysia Nurseries two years ago and have been re-potted into larger pots.

Trees are in Sydney, so if you might be interested contact:
William Zappa, 0416 339 725

NEW TOOL MAKES BIOSECURITY SECOND NATURE

A new planning tool that will help both crop and livestock producers protect their properties against diseases, pests and weeds is now available for download from the Farm Biosecurity website.

The Farm Biosecurity Action Planner helps producers to identify risks based on the six biosecurity 'essentials'.



Plant Health Australia's Manager for Biosecurity Planning and Implementation, Alison Saunders, said that when devising a biosecurity plan for the farm, the essentials are a good place to start.

"By looking at a property with the essentials in mind, a producer can be confident that they are identifying all the relevant biosecurity risks. They can then address the risks by undertaking simple and practical measures suggested in the planner's checklist," Alison said.

Things like quarantining new livestock or plants, signage, pest surveillance, using chemicals appropriately, limiting access to production areas, and cleaning vehicles or equipment are all covered in the planner.

"Working through the planner, you might find that you are already doing some of the recommended practices, or identify other areas where you need to tighten up. The planner will help producers tailor a plan that suits their needs," added Alison.

"If a producer builds a biosecurity plan around their daily, seasonal or yearly farm routines, after a while biosecurity should simply become habit," she said.



The Farm Biosecurity Action Planner is available from farmbiosecurity.com.au/planner. Producers can print their own copy and fill in the details by hand, or record the actions they will take in the document's electronic fields with a computer.

Farm Biosecurity is a joint initiative of Animal Health Australia and Plant Health Australia managed on behalf of members.

Plant Health Australia. 12 December 2014

PRODUCE EXECUTIVE PROGRAM



The topics and speakers for the 2015 PMA A-NZ Produce Executive Program have now been finalised. For full details please download a copy of this year's program brochure.

Don't miss out on the 2015 PMA A-NZ Produce Executive Program at the Mt Eliza Executive Education campus from 26 Apr - 1 May. It is a fantastic opportunity for middle to senior managers in the Australian and New Zealand produce industry to improve leadership skill, increase industry knowledge and network with peers and industry leaders throughout the supply chain in a week long residential environment.

We offer a 10% early bird discount if you register and pay by the 16th of January so get in early and ensure your place. This is on top of the \$1,000 sponsorship made by PMA A-NZ for PMA member companies.

For more information, including pricing and registration please visit www.pma-anz.com/PEP or contact the Program Manager, Anita Pike on +61 3 8640 0947 or apike@streamwise.com.au.

**Ben Attfield, Marketing Manager,
Institute of Food and Grocery Management**

SETTON CHEWY BITES ON N.Y. STAGE

Setton Pistachio of Terra Bella, Inc. maker of Setton Farms Pistachio Chewy Bites, announced that brand Chef Ambassadors, Heather Goldberg and Jenny Engel of Spork Foods, took center stage at the New York Produce Show and Conference. The L.A.-based sister duo demonstrated how to prepare some of their favorite vegan recipes using Setton Farms Pistachio Chewy Bites on Wednesday at the Jacob Javits Center in New York City.

Show visitors watched cooking demos by Engel and Goldberg on the main stage while sampling their delicious vegan creations. When the sisters weren't preparing food at the Central Park Celebrity Chef Station, attendees could meet them at the Setton Farms booth for another chance to sample their recipes.

"We are so honored to be a part of the Celebrity Chef Demonstration at the N.Y. Produce Show and Conference," Goldberg said. "We love sharing with others how to prepare fresh, healthy and delicious vegan food and are looking forward to the opportunity to showcase some of our favorite Pistachio Chewy Bites recipes."

"Jenny and Heather not only know how to create delicious and healthy vegan foods, but they also know how to have fun while doing it," said Setton Farms COO Mia Cohen. "Their smiles and energy are infectious and we are so happy to have them as part of our team and representing our brand at this event."

Setton Pistachio, the second largest pistachio processor in the U.S., has been growing and processing pistachios in the Central Valley since 1986. The company owns over 10,000 acres of planted pistachios and has the capacity to process over 110 million pounds of pistachios per year owned by Setton and its grower partners.

**THE RECORDER recorder@portervillerecorder.com
Posted: Friday, December 5, 2014**

HOW CAN PISTACHIO-POWER FUEL AN ENTIRE CITY?

The concept of an eco-city - a population sustained by renewable resources - is an exciting one. News of depleting fossil fuel resources is never far away, while the idea that we can produce enough power to support an entire city is certainly very promising. But the question remains - could an eco-city work? And how would it work?

If plans for a Turkish eco-city are anything to go by, sources of power can come from the most unusual and unexpected of places. In fact, plans are in place for the development of a new city fuelled by a resource that while in abundance, is not an obvious first choice for energy generation. We're not talking wind, solar or tidal power. We're talking pistachio nutshells.



A no-brainer, in a nutshell

It may sound outrageous, but it soon becomes apparent that - for Turkey at least - this is an ingenious and logical solution. Exporting 6,800 tons in 2013, the country is the world's third biggest producer of pistachios, so there is certainly no shortage of shells. The south-eastern region of Gaziantep - where the city will be located - produces more than half of Turkey's pistachios. And exports are only part of the story - domestic consumption is also high, with pistachios featuring heavily in traditional Turkish cuisine.

In short, supply is certainly no issue.

While pistachio nut shells are in abundance, they are currently a waste product and head straight to landfill. It appears that the alternative - using them for energy production - is nothing short of a no-brainer.

Pistachio-power - how does it work?

The science behind pistachio power is relatively straightforward - fermenting the shells in a vessel, known as a digester, produces biogas. This is then used to generate energy, which will be passed to the city and used to power both public and private properties.

For more information about biogas, take a look at the *Advantages & Disadvantages of Biogas*, or to read how it's put into action in this in-depth look at how the Blue Mountain Biogas Power Generation plant in Utah turns pig manure into power.

Proposals for the eco-city boast a population of 200,000, located just 6 miles from the province's capital, Gaziantep. Hopefully, 60% of the city's electricity will eventually be powered by the shells.

As yet, the science of pistachio power is untested. But there is no lack of confidence in the logic behind it all and feasibility reports are now in progress. A pilot scheme is set to take place on a 135 acre plot of land and - if all goes well - construction for the eco-city is planned to start within two years, expanding organically from this initial site.

So while pistachio-power might not work for every country, it no doubt seems a promising possibility for Turkey.

SOIL LANDSCAPE GRID OF AUSTRALIA



Researchers from across Australia have joined together to develop detailed digital maps of the country's soil and landscape attributes.

Soil and Landscape Grid of Australia provides relevant, consistent, comprehensive, nation-wide data in an easily-accessible format.

Datasets are a first approximation (version 1) of national scale maps designed to be updated and improved over time as resources, new data and improved methods and technologies become available.

Soil and Landscape Grid provides a range of soil and landscape attribute products.

Using the best available data from existing databases, new sensor measurements and novel spatial modelling, the grid presents fine spatial resolution (three arc-seconds or approximately 90 x 90 m pixels) digital soil and landscape attribute maps.

Included in the data are estimates of reliability.

These maps are consistent with the specifications of the GlobalSoilMap project and the data are managed as part of the Australian Soil Resource Information System (ASRIS).

All products developed by the Soil and Landscape Grid of Australia are available at no cost under a Creative Commons Attribution Licence (CC BY) and users should read the Disclaimer.

Cut and paste this address to view the video:

<https://www.youtube.com/watch?v=Z5-ZPVznMEw&list=UUak3NZxjNnWip327vYL8RLA&index=10>

DOS AND DON'TS WHEN PRUNING PISTACHIO TREES



A good pistachio pruning program manages the canopy over the life of the orchard in a way that maximizes the possible yield of clean, open split-nuts from an efficient harvest, says Bob Beede, University of California Cooperative Extension farm advisor, emeritus, for Kings County.

To better manage alternate bearing, he prefers to think of pruning in terms of two years, rather than just the next year. "Pruning harder prior to an on-year improves the yield during an off-year, in my opinion," Beede says. UC researchers are now testing that hypothesis.

Both growth and fruiting habits of the pistachio tree affect pruning. As a very apical dominant tree, it does not branch readily. Instead, the tree grows mostly from the terminal bud and one or two lateral buds behind it, he notes. Consequently, branching must be forced by removing the end portion of a limb. Such heading cuts are made regularly during the training years to develop the desired branching.

Also due to the pistachio tree's apically dominant nature, the trunk and limb diameter do not enlarge rapidly. That requires heading the main structural limbs shorter than desired to keep them upright, Beede adds

Flower buds develop on one-year-old wood, typically towards the base of medium to long shoots and next to the terminal vegetative bud on short shoots (spurs). "The lack of lateral branching causes the fruit-bearing wood to become increasingly distant from the central axis of the tree," Beede says. "Failure to contain the tree canopy to a diameter of about 17 feet results in crop falling onto the ground at harvest due to the limited size of the harvest equipment."

Eventually, during the on-bearing seasons the weight of the crop forces the main structural limbs to bend downward. Without corrective pruning, the pistachio tree canopy begins to take on the appearance of an umbrella, Beede notes

"This combination of less-upright fruiting limbs and their greater distance from the tree's center creates major problems for effective harvest," he says. "The high energy imparted to the trunk by the shaker can no longer be sufficiently transmitted to the fruiting zone for its removal."

Some growers try to solve this by simply shaking the tree harder. The result, he points out, is more frequent equipment breakage, rapid sling wear (the thick rubber sheets draped

around the shaker pads for protection), excessive removal of next year's fruiting wood (spurs) and, possibly, more tree stress from disruption of roots at the tree's crown. Harder shaking also flings the crop past the catch frame of the harvester.

This can be prevented by pruning the pistachio tree so as to push the canopy perimeter back, reducing its diameter and directing growth upward, Beede reports. That's done mainly with thinning cuts, which completely remove a limb at its point of origin.

"To achieve a more compact and upright tree, thinning cuts are made to flat limbs around the outside of the tree and within the canopy where excessive fruitwood exits," Beede says. "Be careful not to make too many cuts in any given sector of the canopy unless the fruitwood is unusually abundant. In addition to distributing the thinning cuts over the entire tree, avoid removing all of the lateral limbs on a specific structural branch in order to make room for adjacent branches. Rather than creating these so-called snakes, it is better to leave the best structural branch minimally pruned and to remove the competing branch entirely."

Also, he cautions against opening the center of pistachio trees. "We do not want them to look like peach trees at the completion of pruning," Beede says. "Because of their growth and fruiting habits, pistachio trees will open up naturally, allow sufficient light into the canopy center for fruitwood production."

He considers loss of fruitwood in the middle of the tree over time as more a function of apical dominance than insufficient light penetration. The key in pruning is to keep the pistachio canopy compact and upright for productivity and harvestability.

"Don't prune mature trees to the point that they produce lots of long whips," he says. "Although this looks good, it most likely means that the tree has been over pruned."

Research shows that the pistachio tree has preformed shoots. They set seven to nine bud positions before the season begins. Unless the tree is excessively vigorous, these preformed shoots grow into spurs and set lots of crop, he explains.

"If mature trees are over-pruned, these preformed shoots are "pushed" into continued growth," Beede says. "I believe the most productive pistachio tree is one that has hundreds of these short, preformed shoots, rather than lots of long whips."

Greg Northcutt. Farm Press. November 2014