

MARUYAMA

When you depend on your tools for a living they'd better be tough, they'd better be rugged and they'd better be dependable.

That's why Maruyama professional-grade outdoor power equipment is backed by the longest commercial-use warranty around...5 years.

That's right a 5 year commercial warranty. Extraordinary.



www.maruyama-us.com



For your local Maruyama dealer please call:

1-800-373-5542

Pomegranates in Florida?

By Bill Castle

Ever wonder how to eat a fresh pomegranate? Not to worry. That's a question that often arises among first-timers. The fruit is commonly seen as a challenge, especially in not getting splashed with red juice. One method is illustrated in Fig. 1.

The real question is whether pomegranates can be grown in Florida for fun and profit. The answer to the first part is a resounding yes, and to the second part, maybe. Florida's subtropical environment is not recognized as a climate suitable for growing pomegranates. They are typically grown in locations with hot dry summers and cool or cold winters. That's why in the United States, the only place where poms are grown commercially is California, the home of the Wonderful variety and the source of many popular juice products on the market today.

The fun part of pomegranate is its appeal as a garden plant as well as for commercial enterprises. The plant is quite attractive and easy to propagate and care for. There are many selections with commercial potential and ornamental types, too. The plants produce beautiful flowers over a period of several months from spring into the summer. There are shrubby types and others that are grown as small trees to about 8 feet to 10 feet tall. Part of the appeal is the unusual fruit and the air of antiquity about it (Fig. 2, page 15). Pomegranate is actually an old fruit. It is one of the first to be cultivated and belongs in a class with other fruits of antiquity: figs, dates and olives.

Despite our questionable environment for growing pomegranates, the plant is very familiar to many homeowners throughout much of central to north Florida. In fact, as part of our collecting activities, our team discovered a 100-year-old plant in Marianna and another one, perhaps 80

years old, in Perry. Pomegranates are also offered in a surprising number of ornamental and fruit tree nurseries in Florida, Georgia and on up the eastern seaboard to Virginia.

We began studying pomegranates at the University of Florida-IFAS, Citrus Research and Education Center (CREC) in 2009. The interest was stimulated by the introduction and spread of huanglongbing in Florida citrus trees and the resulting interest in alternate crops.

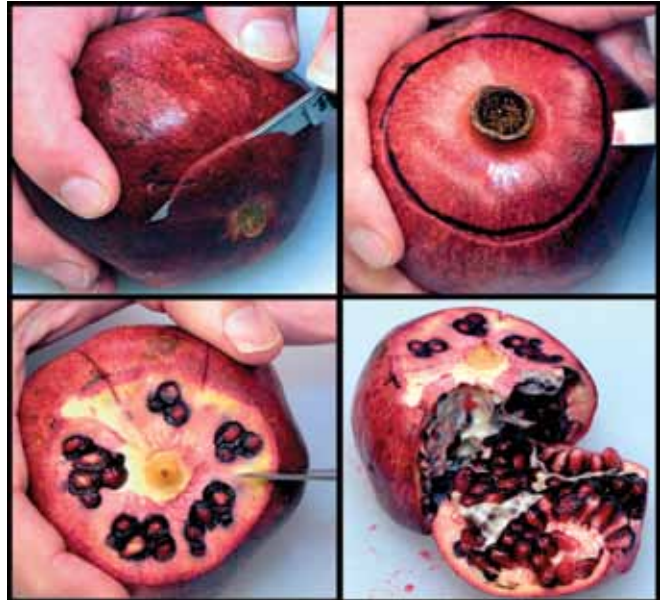


Fig. 1. One way to eat a fresh pomegranate is to slice off a piece of the skin on the stem end to create a flat surface (upper left); ring the blossom end to remove a "cap" of the skin and expose the interior of the fruit (upper right); score the skin along each side of the segments (lower left) and then pull the fruit apart (lower right) to expose the seeds which are then easily removed from the supporting tissue.

(Thanks to Jeff Moersfelder of the USDA National Clonal Germplasm Repository, Davis, Calif., who showed this method to the author. Photo credit: Kathy Snyder, CREC)

Our first effort was to collect, propagate and distribute pomegranates. We now have 85 accessions and foundation blocks established at the CREC and Water Conserv II near Winter Garden. Those plants are between 1.5 and 2 years old, and the Water Conserv II location has already been the site for two field days. The Water Conserv plants flowered extremely well this year and have set very good crops. Our collection was assembled from accessions obtained primarily from the USDA National Clonal Germplasm Repository at Davis, Calif., and two other rather exciting collections in Georgia at the University of Georgia in Tifton and the USDA Southeastern Fruit and Nut Lab in Byron. Also, we



Figure 2. Pomegranate and its parts

have plants generously shared with us by local nurseries and homeowners.

With commercial partners, we have propagated about 5,000 plants and distributed most of them to 30 or so cooperators for trial in dooryards and in small commercial plantings. We are still seeking cooperators.

Why then, “maybe,” regarding commercial potential? First, what are the commercial possibilities? Pomegranates could be grown for fresh fruit or juice. The fruit may be grown conventionally or organically. The fruit and the juice have extraordinary potential for small farm or fruit-stand operations with marketing at that level or locally, as in the community-based agriculture concept. The newest product on the market is fresh arils. The chore of opening a fruit and removing the arils by hand is eliminated. By the way, the aril is the juicy part of the fruit and is sometimes confused with the seed. The seed actually consists of two parts: the crunchy interior structure that contains the embryo and may sometimes be eaten, and the aril which is actually an outgrowth of the seedcoat.

Will we compete with California? Absolutely not, so why engage? Because if we learn to grow pomegranate in Florida, we might be able to produce quite a large diversity of cultivars and offer an incredible range of selections to consumers — selections not available otherwise or elsewhere. For example, when I was in California last November to study pomegranates, I visited the collection at Davis during the annual public taste-testing. We were exposed to a fantastic range of fruit and juice colors, but most were red with sweet, tart flavors.

Later, a small group, including a



MACHINE STORAGE

FARM SHOPS



COMBOS

Style & Quality

DISCOVER THE ENDLESS POSSIBILITIES OF THE WORLD OF MORTON BUILDINGS...

Whether you need basic machine storage or a bold multipurpose building, Morton can construct a functional building that is easy to maintain and accommodates your needs.

Come visit us at the Citrus Expo, Aug. 17-18 Booth #600

MORTON BUILDINGS™

Morton Buildings is a registered trademark of Morton Buildings, Inc. All rights reserved. W13VH02297000 / WWV 007848 / WCB C034362. REF CODE 043

Vero Beach Port Charlotte Gainesville Tallahassee
(772) 205-0361 (941) 223-6924 (352) 271-0980 (850) 893-8449

800-447-7436, ext. 1 • mortonbuildings.com

number of people from all over the world, toured the repository collection. There were two Iranian-Americans who were disappointed with everything they tasted. None of the selections reminded them of their pomegranate experience when they lived in Iran. That is until we tasted Azadi, which brought a smile and led to an armful of fruit being carried out of the planting. I subsequently learned from a colleague that the name is Persian, and I was not pronouncing it correctly. It means "freedom." Furthermore, it is a large yellow fruit with soft seeds and a mild flavor (Figure 3). Add all of that together and you can see why pomegranates are charming.

The answer to the "maybe" question is readily apparent at this time in our project. Because of the Florida environment, i. e., rainy, humid summers, we face the challenge of determining whether viable numbers of fruit can be produced, given fungal and bacterial diseases and the lack of a known conventional or organic means to combat those types of problems. We have not observed any significant foliar pest problems so far in the greenhouse or in the field. However, while some of our foundation plants at Water Conserv II produced 50 fruit last year when they were 14 months old, they retained very



Figure 3. Azadi pomegranate as grown in the Davis, Calif. repository.

Photos by Bill Castle

little of the fruit into September because of fruit drop and obvious fruit disease damage. We observed similar events on the mature plants at Tifton. Until those problems are solved, commercial potential will remain unrealized.

But, there is good news. Once the plants get a bit of size to them, they are very cold hardy and apparently can be grown more or less like orange trees regarding irrigation and fertilization. Also, a list of approved pesticides is now available on the CREC Web site. Go to <http://www.crec.ifas.ufl.edu/> and open the section on Extension. There you will find another section titled "Horticulture." Under that heading is the pomegranate Web site.

The Web site has many exciting features, including beautiful descriptive illustrations of the various selections available in California and here in Florida, a pesticide list, our list of accessions, the Field Day handouts and various other practical resources.

If pomegranates excite you, too, then contact me.

Bill Castle is professor emeritus in horticulture, University of Florida-IFAS, CREC, Lake Alfred. He can be reached at (863) 956-1151 or bcastle@ufl.edu. Appreciation is extended to Jim Baldwin, senior biologist, CREC, my partner in this project, for his considerable contributions in the propagation and assembling of our collection, record keeping and developing cooperator trials.

BANK WITH THE AGRICULTURE EXPERTS.



TD Bank understands the critical role agriculture plays in our local economy. That's why we have an experienced team who are dedicated to your unique needs. We offer a higher level of personal service and innovative solutions along with the security, stability and capital strength you need in a banking partner.

- Equipment Financing
- Insurance Services
- Foreign Exchange
- Treasury Management
- Lines of Credit
- Term Loans



America's Most Convenient Bank®

PUT THE POWER OF TD BANK TO WORK FOR YOU.

Speak with Andy McGinnis, Regional Vice President, at **1-863-648-5207**
or Brian Boyce, Relationship Manager, at **1-863-648-5790.**

Member FDIC TD Bank, N.A. | Some fees and restrictions may apply. Loans subject to credit approval. | Equal Opportunity Lender | TD Bank Group is a trade name for The Toronto-Dominion Bank. Used with permission. For detailed credit ratings for The Toronto-Dominion Bank and TD Bank, N.A. visit <https://www.td.com/investor/credit.jsp>. Credit Ratings are not recommendations to purchase, sell or hold a financial obligation inasmuch as they do not comment on market price or suitability for a particular investor. Ratings are subject to revision or withdrawal at any time by the rating organization. Insurance products are: not a deposit; not FDIC insured; not insured by any federal government agency; and, not guaranteed by TD Bank, N.A. or any of its affiliates. Insurance products are offered through TD Insurance, Inc. TD Insurance, Inc. represents the product provider in placing your travel insurance, and may provide services to you for that product provider. TD Insurance, Inc. will receive compensation from the product provider in connection with the placement of your travel insurance. TD Insurance is a service mark of The Toronto-Dominion Bank. Used with permission. 10555 (07/11)