# California MacNews

California Macadamia Growers News and Information



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### Regenerative Agriculture

By Kurt Merrill



There is a lot of buzz in the agricultural sciences around regenerative farming practices. And while implementing regenerative farming methods may be challenging in the near turn, it is clear that moving in a more sustainable direction is the way of the future. Growing Macadamia nuts is no different. Gold Crown advocates regenerative agriculture practices that prioritizes biodiversity, ecosystem resiliency and soil health.

Our Grower Services assists in crop production and management practices that help enhance quality and crop size. As a grower and processor, our sustainability goal strives for 100% of all discarded components are converted to environmental inputs that are placed back into the soil. We encourage all of our growers to examine regenerative farming practices and begin to phase them into your operations. Healthy soils = healthy orchards.



## Macadamia Varieties: "The Miraculous Muranga 20"

By Kurt Merrill, Gold Crown Macadamia Nuts

One of the most popular commercial Macadamia trees in Kenya is a M. integrifolia dubbed "the Miraculous Muranga 20 (MRG20). Developed in Kenya, the worlds 5<sup>th</sup> largest Macadamia nut producing nation, the MRG20 variety has the unique ability to adapt to many different climatic conditions. It can be grown in areas with the average mean temperature range of approximately 60-70 degrees, an annual rainfall of 33 inches and a range in elevation from 4500-5500ft.

The MRG20 is one of four production trees released by the Kenya Agricultural and Livestock Research Organization (KALRO). The MRG20 is quite precocious. An expertly grafted tree can reach maturity in just three years, bearing an initial 44lbs of nuts. Fully grown, a mature tree can yield up to 220lbs of nuts.

There is currently one nursery in Southern California that is growing MRG20 seedlings along with some additional Kenyan and South African Varieties. We look forward to seeing the initial results from these trees in the next 3-4 years!

# Preparing your Nuts for Sale

By Christi Caruso, Warehouse Manager



The process of Macadamia nuts going from farm to market is much more involved than anyone purchasing Macadamia nuts would ever realize. As growers, we definitely know! What do consumers want? They want a tasty good-looking nut that's easy to crack. That's where we come in.

When we receive nuts from growers, we have the lengthy process of drying and then sorting by size, color, and sound. A lot of attention and care goes into this process to provide the customer with high quality nuts. To make this process more efficient, we want to provide growers with guidelines to help prepare their Macadamia nuts for sale to Gold Crown.

First, growers need to harvest, husk, and initially dry the nuts. Once this is done, the nuts will need to be culled to ensure there is no debris or damaged nuts, such as: insect or animal damage, holes, cracks, discoloration or mold. We will not be able to purchase nuts with any of these issues.

When transporting the nuts, we recommend that growers put the nuts in polyurethane sandbags. Each bag holds about 20lbs. We then weigh and tag all the bags with a grower lot number and give the grower a slip.

From there we dry them in our drier for 3-4 days. Once the moisture content is down to 1.5-2%, we are ready to grade them by size and perform a "crack-out". Our grades are Commercial, Premium, Premium+ and Premium+ Jumbo. This is how we calculate how much we purchase the nuts for from the grower. Continued on Page 3

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After the nuts are dry, we run them through our sizer. We then hand sort them to ensure there are no imperfections before we package and send them out to our customers.

Once we have processed each lot, we send out a check to the grower with details of the weights, grades and any other processing notes.

For a current Gold Crown pricing structure, please email us at info@goldcrownmacadamianuts.com

### **CA Ground Squirrel Management**

Disclaimer. The following information is not intended as a how-to guide, as a substitute for proper training or obtaining the appropriate licensure/certifications to use the techniques and products mentioned.

#### **IPM Strategies**

The number one strategy to help alleviate CA ground Squirrel (Spermophilus beecheyi) robbing is to keep your orchard as clean as possible. During the harvest season, the shorter the harvest interval the better. After harvest, any late drops or nuts were not harvested should be cleaned from the orchard floor. This helps eliminate their food source.

#### Trapping

Trapping in an effective method for reducing the squirrel population. There are several different traps on the market. The two that are most commonly used are the "Squirrelinator" type cage trap and Conibear 10 style body traps (manufactured by Duke). The Squirrelinator is used in combination with bait (some use peanut butter spread on Mac nuts). This type of trap is most commonly used in areas that may potentially have non-target pests (e.g., cats, dogs) come in proximity with the trap. Make sure traps are secured by either staking or chaining the trap to a concrete block. If not secured, coyotes have been known to steal the entire trap.

The Conibear 10 style body trap is very effective. It is used in an open set (without bait) and is placed directly over the entrance/exit to the squirrel burrow. This style of trap can be very hazardous to non-target animals since it is a body-style "snap-trap". BE SURE to only set it in areas where non-target animals will NOT come in contact with the trap. It is also very important to properly anchor this style of trap or the coyotes will steal both the carcass and the trap! Continued on Page 4

### Macadamia Tree Importation: Not Authorized Pending Pest Risk Analysis (NAPPRA)

Status



Many of you may know that the USDA placed a "NAPPRA" status on the importation of all macadamia trees and seedlings several years ago. This was done to help stem the spread of Neopestalotipsis macadamiae and keep it from spreading to the United States. This fungi is associated with causing dry flower disease which reduces the ability of flowers to pollinate and set fruit. The disease, first discovered in Australia, has now been found in Brazil and China. For more information, the macadamia import status please visit the USDA website and use search terms NAPPRA, plants, macadamia.



#### Please visit our Grower Services Page:

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- **Used Equipment**

https://goldcrownmacadamianuts.com

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As long as its anchored, coyotes (and skunks) will clean the squirrel off of the trap. For more information about trapping squirrels, here is a good link to a training video approved by the CA State Department of Pesticide Regulation (DPR). https://www.certifiedtraininginstitute.com Please seek proper training and understand state and local ordinances before trapping CA ground squirrels.

#### Raptors

Encouraging raptor populations in and around your orchard has been a helpful resource for controling CA Ground Squirrel populations. Building perches for Red-Tailed hawks, Red-Shouldered hawks and American Kestrels has even been incorporated by several California cities to help reduce populations. We are very fortunate at Gold Crown to have several Kestrels, many Red-Shouldered hawks and a half dozen Great Horned owls hunting our property.

#### Shooting

In some areas, eliminating squirrels with either a pellet gun or a centerfire rifle (e.g., .22cal) may be feasible and legal. Please check local and state ordinances.

#### Baiting

The use of the anticoagulant diphacinone has been a common method for controlling ground squirrel in California.



American Kestrel: Photo Credithttp://wildlife.foothillsclusters.com/america n-kestrels-on-a-farm



Conibear10 style trap set.

## Top Macadamia Producing Countries

- 1. South Africa
- 2. Australia
- 3. China
- 4. Kenya
- 5. Guatemala
- 6. United States (Hawaii)
- 7. Malawi
- 8. Vietnam
- 9. Brazil

The State, however, has just changed how diphacinone can be used and may now only be used in Agricultural production. Your agricultural property must be registered with your County Agricultural Commissioner AND the product must be applied by a qualified applicator. For more information on the new law, please visit: <a href="https://www.cdpr.ca.gov/docs/registration/reevaluation/chemicals/diphacinone.htm">https://www.cdpr.ca.gov/docs/registration/reevaluation/chemicals/diphacinone.htm</a>

#### Carbon Monoxide Machines

Carbon Monoxide (CO) machines like the GopherX may be used to control ground squirrels. These machines pump CO down into burrows eliminating the squirrels and seems to be relatively effective. Unlike cage trapping, however, there is no direct evidence of a kill. You can only gauge its effectiveness by the reduction of above burrow activity. In addition, another issue that we have had is problems with Coyotes excavating large holes trying to retrieve the carcasses. Again, CA state law governs the use of these machines and may not be used within certain distances to dwellings and structures. For more information on CO machines please visit:

https://www.cdpr.ca.gov/docs/legbills/calcode/030206.htm



Gold Crown started a YouTube channel! This is the thumbnail for our short video on cracking macadamia nuts.

https://www.youtube.com/watch?v=Q1SnJMbbj3A