Selecting and Judging Samples for Pecan Shows

Guide H-621

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Pecan shows are one of the best teaching tools available. They render a real service to the pecan industry. These shows help pecan growers grade and evaluate their standard varieties and the shows acquaint growers with new varieties and the numerous pecan hybrids being developed. These shows also focus attention on the pecan and help promote consumer interest in this product.

Categories used in pecan shows are rather uniform in all pecan shows in the Southwest and they are described below.

Variety – An individual pecan tree that has been named and is commercially propagated.

In-shell Variety – A variety that has less than 50 nuts per pound (table 1). In-shell pecans are suitable for sale in the shell.

Shelling Variety – A variety that has more than 50 nuts per pound (table 2). Shelling pecans are suitable for sale as a shelled pecan.

Known Hybrid – A pecan that has not been named, but for which both parents are known. This includes pecans commonly referred to as USDA Crosses. The parents or identification number must be listed on the entry card.

Variety Seedling – Pecan that is unnamed and has not been commercially propagated, but for which, in the opinion of the screening committee or judges, one and only one of the parents is either known or strongly suspected.

Native – A pecan hybridized (crossed) under natural conditions. As far as can be ascertained

from the history of the tree's origin, and from the appearance of the nut, there was no named variety that served as either parent.

Table 1. In-shell varieties.

* Apache	* Mahan
* Barton	* Mohawk
* Burkett	Odom
* Choctaw	Shoshoni
* Comanche	* Stuart
* Delmas	* Success
* Desirable	* Wichita
* GraKing	Known Hybrids
* GraTex	Variety Seedlings
* Imperial	Other In-shell Pecans
* Kiowa	

^{*}Major in-shell varieties grown in the Southwest

Table 2. Shelling varieties.

Caddo	Peruque
Cape Fear	Ranger
Cherokee	Riverside
* Cheyenne	* San Saba Improved
* Clark	* Schley
Elliot	* Shawnee
Halbert	* Sioux
Harper	Squirrel's Delight
* Ideal	Tejas
John Garner	Texas Prolific
Kincaid	Texhan
McCulley	* Western
* Moore	Known Hybrids
* No. 60	Variety Seedlings
Nugget	Other Shelling Pecans
* Onliwon	

^{*}Major shelling varieties grown in the Southwest

NMSU INTERNATIONAL PECAN SHOW

PECAN SCORECARD	MAXIMUM POINTS
Shell appearance - Shape	5
- Color - Uniformity	
Size - No. nuts per kilogram - Uniformity	15
Percent kernels	40
Kernel quality - Appearance - Color - Shelling characteristics - Texture - Taste	40
Total	100

Selecting Pecan Samples

Using proper procedures to collect and select pecans for a show is important and could be the difference in winning and losing. There are many instances during a pecan show when judges have to choose between two samples which are almost equal in appearance. When this situation occurs, judges look for small but valid differences in each sample to select the winner. This occurs often in classes with a large number of entries. Therefore, the exhibitor should select nuts as carefully as possible, discarding all pecans that do not meet the requirements for a good pecan sample.

The principal basis for judging a show entry is nut quality and uniformity. Production of good quality pecans with a good size starts in the orchard. It is essential the producer use the best known cultural practices in producing pecans to ensure the best quality under the environmental conditions where the trees are grown. Good fertilization, water management, and insect control programs are a must.

There are other procedures, other than cultural practices, which can be used to develop a better sample than using field run samples. It is important to know what nut characteristics judges look

for when judging each entry. Quality and uniformity are the primary characteristics, but additional characteristics are considered when needed. The following is a list of these characteristics.

- 1. Size—the number of pecans per pound.
- 2. Percent kernel—the percent of kernel contained in the whole nut.
- 3. Kernel color—the actual color of the kernel, with a bright yellow being ideal.
- 4. In-shell appearance—the natural appearance of the pecan in-shell.
- 5. Uniformity—the uniformity of size and shape in each individual sample as entered.
- Number of whole kernel halves—the number of whole kernel halves which are shelled after cracking. This will vary with variety.
- 7. Insect damage—amount of insect damage on the shell (shuckworm) and the kernel (stink bug).

Size, percent kernel, and kernel color are the characteristics most important and are used by judges to determine winners in most cases. There are times, however, especially when a large number of samples have been entered in one class, when other characteristics are used to determine the winners.

The following are some suggestions which should help collect and select pecans for show once they are mature.

- 1. Select nuts from young trees when possible. Young trees produce nuts that are larger in size and are better filled because of their greater vigor.
- 2. Select nuts from trees which have a light crop, or better yet, from trees which have few nuts per cluster. A tree which retains a large crop may have smaller and poorly filled nuts because of competition of the heavy crop and excessive drain on the tree.

- 3. Harvest pecans immediately following drop. Pecans that fall early are of better quality and are not exposed to the elements as long as pecans that drop later in the season.
- 4. Do not pick nuts from the shuck if the shuck is green or the nut is still attached to the shuck. This means the pecan has not dried properly and the shell will turn a light color, which is abnormal. The pecan will also contain too much moisture at the time of cracking and shelling, which is undesirable. Contrary to popular belief, the kernel will not be of brighter color than if harvested immediately after dropping to the ground.
- 5. After collecting pecan samples, leave them at room temperature for two or three days so they will dry to a moisture content suitable for shelling. After they have dried, place them in a cool environment (refrigerator) until they are submitted for the show. The samples can be placed in a dry, cool environment for a couple of weeks if good air circulation is prevalent and humidity is low. Be sure the nuts are open to the air and not clustered together when drying.
- 6. If there is more than one tree of a particular variety to select a sample from, crack and shell a few from each tree and observe the interior quality. Look for a solid well-filled kernel as opposed to opening in and around the kernel. Also observe the color of the kernel and stink bug damage (black pit). If stink bug damage occurs on many cracked nuts, select another tree or location if possible.
- 7. Do not alter the physical in-shell appearance of the nut in any way, such as polishing or rubbing. This detracts from the natural appearance. Pecans which exhibit insect (shuckworm) damage on the shell should not be included in the sample. Pecan samples should be blemish free.
- 8. If time permits, determine the weight of each individual pecan for each entry so a uniform sample will be selected. It is better

- to select a sample of uniform size than one consisting of mixed large and small nuts. While selecting these pecans, check for abnormal shape, splits, cracks, and blemishes. Do not include these in your sample. If you are not able to weigh each pecan, try to pick the heaviest by feel and uniformity.
- 9. Sometimes part of a tree (shoots or limbs) will be defoliated (salt accumulation, webworm) before nut maturity. Harvest pecans from the opposite side of the tree if such damage is present. Pecans from the damaged parts of the tree will be of poor quality.
- 10. A qualified sample consists of 40 nuts. It is better to enter 41 or 42 nuts to be sure of your count because a nut can be lost during handling. If the entry consists of less than 40 nuts, it will be disqualified.
- 11. Prevent nuts from getting wet before harvesting and selection. If a pecan gets wet, it will cause the kernel to darken and affect the natural in-shell appearance of the nut.

Remember, proper handling and selection will result in a better quality entry for all characteristics judges look for and greatly increases your chances of winning. There is no substitute for patience in handling and selecting your show sample.

Judging Pecan Samples

The international pecan show held annually on the NMSU campus attracts entries from several states in the United States and Mexico. It is important for the pecan grower to see how the pecan samples are processed and judged. A random sample of 10 pecans are taken from each entry in the show. The 10-nut samples are weighed, shelled and then the kernels are weighed. From this data, the number of pecans required to weigh a pound, to weigh a kilo, and the kernel percentage is calculated for each entry. This data serves as foundation information for judges as they evaluate the pecan exhibits.

For judging purposes, an in-shell variety is one that usually has less than 50 nuts per pound, or 110 nuts per kilo, and is suitable for sale in the shell.

A shelling variety usually has more than 50 nuts per pound, or 110 nuts per kilo, and is more suitable for sale as a shelled pecan than if left in the shell.

Winners are selected on the basis of pecan size uniformity, appearance, color, and all of the factors of kernel quality including kernel percentage, color, general appearance, texture, hollowness, and finally, taste. Classes are placed at first, second, and third. Classes with fewer than three entries are judged on a merit basis.

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