

Today, buying a set of arba minim is easy, but there was a time when lulavim in particular were so rare that they were passed from generation to generation. What changed all that?

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In our times, we take it for granted that *lulavim* are plentiful and widely available. But it wasn't always so.

In northern and eastern Europe, where date palm trees don't grow and importers were rare, it was common that congregants fulfilled their halachic obligations with the one set in town; that of the ray or the congregation, Ray Moshe Feinstein ztz"l, born in Belarus in 1895, was known to have told people that he used the same *lulav* for three successive years before coming to America in 1936.

Today, we are blessed with an abundance of *lulavim*, but most of us never stop to think where they come from. In fact, our lulavim have had different sources over time and there is a lively halachic debate about which are kosher. As we will see, a ban on *lulav* exports from Egypt a f<mark>ew years ago only served</mark> to strengthen the Israeli *lulav* industry and to introduce a new practice that has made many more kosher lulavim widely available.

From Whence the Lulay? The Torah explicitly states that one aspect of the rejoicing that we are commanded to feel on Succos, zman simchaseinu, is achieved through the shaking of the arba minim. Along with esrog, arayos, and hadassim, the largest and most prominent member of the group (and the one after which the mitzvah is usually named and which the blessing mentions) is the *lulay*. It is referred to in the *pasuk* (*Vayikra* 23:40) as "*kapos* tmarim" — unopened palm fronds (see Rashi and Succah 32a).

The most common and acceptable source of lulavim is the standard date palm tree (*Phoenix dactylifera*). These trees can grow fairly tall, up to 25 meters, making harvesting the lulav a nontrivial matter. The date palm is dioecious, meaning that it produces separate male and female plants. Only the female produces fruit, although both produce *lulavim*. Each tree produces either pollen but no seeds (the male) or seeds (and then fruit) but no pollen (the female). In nature, when the trees are close to one another, the wind is sufficient to effect pollination. However, in commercial production, hand pollination is standard practice.

Lulavs, Lulavs, Everywhere

Ancient farmers, along with Chazal, were well aware of this and that once the female sheath splits open it was important to pollinate it within a few days. The Mishnah (*Pesachim* 4:8) relates that the people of Yericho pollinated palm trees all day on Erev Pesach. Note that the word used in the Mishnah, *murkav*, is often used to denote "grafting" and was probably used in this context because farmers at that time would tie the male flower sheath onto the female tree so that when the pollen matured it would be close to the female. Not fully appreciating the meaning of "*murkav*" in this context, numerous translations of the Mishnah translate it as "grafting" and some Mishnayos with illustrations show an unusual drawing of palm trees being grafted.

Date palms grow across the world, but they thrive in warmer climates. At 10 degrees Celsius the trees cease to grow, and at 5 degrees Celsius they are damaged. Date palms prefer warm summers and have therefore been grown in Israel and the Middle East for thousands of years.

The date palm was well-known to Chazal. Yericho was known as *ir hatmarim* "city of dates" and during the time of the Temple we are told that "dates are not brought as first fruits, except dates from Yericho" (*Tosefta, Bikkurim* 1:5), because dates of that area were considered of the highest quality. With the failure of the Bar Kochvah rebellion in 135 CE, we suffered a near-total Diaspora. After that, the cultivation of date palms ceased in Eretz Yisrael.

In the halachic literature from Europe, there is often mention of the shortage of *esrogim*, but much less discussion about *lulavim*. Today, with temperature control and the right kind of bag, one can keep an *esrog* fresh for many months, but that was impossible in Europe. So Jews there needed new *esrogim* every year; not so for the *lulav*.

Firstly, unlike an esrog, which could not grow in Europe, European Jews were sometimes able to harvest a *lulay* from local, fruitless trees. Regarding these, the Chasam Sofer (*Succah* 34b; see also *Shu"t Minchas Elazar* 5:8) wrote that they can be used without hesitation, because although palm trees in Europe will never bear fruit, they are called "*kapos tmarim*." In addition, a *lulay* can be kept from year to year and will look like a *lulay*, only drier. The issue was therefore halachic — the status of a *lulay hayavesh* — and not practical.

The Mishnah (Succah 3:1) lists a dry lulay as one of the factors that would make a lulay pasul. The Tosefta (Succah 2:9; see Succah 31a-b) says that slightly dry lulavim are kosher and only totally dry are pasul. Ray Yehuda says even dry are kosher, as demonstrated by the custom of certain locales where lulavim were difficult to come by so they bequeathed them to the next generation or even grandchildren. Based on this gemara, the Rambam (Hilchos Shofar, Succah, Lulay 8:1) rules that in a pinch, a dry lulay is kosher, while the Raavad disagrees.

French Baalei Tosafos ruled (see *Tosafos Rabbeinu Peretz*, 5756, page 50; Tosafos *Succah* 29b) that a *Iulav* is considered "dry" when it cracks from a nail; in other words, very dry. Based on this lenient ruling, Jews of that time and place were able to use a *Iulav* for decades. In the 17th century, when trade was better, there was a custom in some locales to still use, in addition to fresh *Iulavim*, an old one, too, seemingly in memory of what once was (*The Four Species Anthology*, Zohar Amar, 2009, p. 99).

Are All Lulavim Born Equal? In the Midrashic literature (e.g., Menachos 27a, Vayikra Rabbah 30), the Julav is always portrayed as coming from a fruit-bearing tree. There were indeed many poskim who ruled that any palm that did not produce edible dates was invalid for the mitzvah (Tzafnas Panei'ach, Lulay 7:1; Shu"t Sh'eilas Shlomo 1:63). Many contend that a male palm is kosher for the mitzvah despite not producing dates. Others reject the need for dates and



1. LULAV MAVEN Moshe Zakai, a veteran of the *lulav* business for the last 40 years, shows Ari Z. how date palms continue producing fronds for

decades

2. TWO FOR ONE Date growers used to think that picking

the *lulavim* would harm the fruit, but today they know it's a winwin situation, providing two crops from the same tree

3. BREAKING THE

CARTEL Kibbutz Tirat Zvi prepares *lulavim* for halachically acceptable long-term storage. This year, they hope to put 100,000 *lulavim* on the market

4. POPULAR BUT PASUL

The Washingtonia palm is found all over Israel, but no posek authorizes it for a *lulav*



7 Tishrei 5774 | September 11, 2013 MISHPACHA 61

Lulavs, Lulavs, Everywhere

see in the name "kapos tmarim" a general category of tree (Chiddushei Chasam Sofer, Succah 34b s.v. Rav Yishmael; Shu"t Har Tzvi, Orach Chayim 108 at end; Tzitz Eliezer 8:22; Yechaveh Daat 1:67). The Gemara (Bava Kama 59a) recognizes that some dates, so-called Aramaean dates, were of such poor quality that they were fed to cattle, and yet there is no suggestion that they are not good for *lulav*.

Types of date trees differ from each other in leaf structure, and not all are acceptable for the mitzvah. After the standard date palm tree (*Phoenix dactylifera*) the Canary *lulav* is the most common alternative source of a *lulav* found on the market. It is scientifically known as Phoenix canariensis, commonly called Canary Island date palm, and also known as the pineapple palm. Scientifically, it is in the same family (*Arecaceae* – palm family) and genus (Phoenix) as the true date. It is a large, slow growing, solitary palm and is easily recognized due to its crown of leaves and its smooth and tall trunk. It can grow as far north as southern England and as far south as central Chile.

1. LEGAL TENDER Bar Kochvah minted a coin with the inscription "to the freedom of Jerusalem" with an image of a lulav reminiscent of the glory of the Beis HaMikdash

2. A PALM BY ANY OTHER NAME

Poskim are divided regarding the halachic status of the Canary palm, although Rav Shlomo Zalman Auerbach ruled it acceptable

3. CITY OF DATES The floor mosaic is. what remains of Yericho's "Shalom Al Yisrael" synagogue from the time of the Mishnah, but the tiled palm tree is still a testimony to the city's ancient reputation as "ir hatmarim"



Date seeds uncovered at Masada in 1973 by archeologist Ehud Netzer made their way to the lab of our friend, archaeo-botanist Professor Mordechai Kisley of Bar-Ilan University, where they sat for several decades. In 2004, they were carbon-dated to about the time of the Churban Bayis Sheini, and in 2005 an attempt was made to germinate them. Just as the Jewish People are again blossoming in our land, so too is this 2,000-year-old seed from Masada. The tree is now over eight feet tall, but because it is a

The Canary Islands are located in the Atlantic just off the northwest coast of mainland Africa, 100 kilometers west of the border between Morocco and the Western Sahara. The Phoenicians, the Greeks, and the Carthaginians visited them, and thus it is possible that Chazal knew about the trees that grow there. Between 75 and 100 years ago, Canary palms were brought to Israel and are today a very popular ornamental tree found all over the country.

Canary lulavim were being sold for a while, but only in 1957 was the question of the acceptability of the Canary lulav first raised. The initial discussion was initiated by Rav Yisrael Yotkovsky (in the journal Kol Torah, Av-Elul 5716) and it has received considerable attention since then, even becoming the subject of an entire volume. The concern is that the tree, leaves, and fruits of the canary date differ from the traditional date palm. The canary has a wider trunk, the leaves are green-yellow, not green-gray, they are closer together, the spine is more flexible, and the fruits less edible. The question is whether when the Torah required using "kapos tmarim" as a lulav it meant exclusively the

> kovsky was of the opinion that the Canary and the standard palm are different species despite the fact that they can cross-pollinate. He thus felt that the Canary was pasul as a lulay. Shortly thereafter, Ray Shraga Shlomai, a religious agronomist from Kfar Haro'eh, published a rebuttal (Kol Torah, Shvat 5717; reprinted in Hamaayan [Pressburg] Shvat-Nissan 5718), in which he argued that they are halachically the same species. Other scientists weighed in and disagreed.

Our mentor, Professor Yehuda Feliks, offered his opinion in 5727 (Hamaayan, Tishrei) and compared it to the esrog-lemon conundrum. Scientifically, esrogim and lemons are the same genus, but different species, and so all poskim reject a lemon for use as an esrog. Prof. Feliks felt that it should be the same with the Canary palm. Rav Shlomo Zalman Auerbach ztz"l (Halichos Shlo<mark>mo, Moadim</mark> vol. 2, 10:9, p. 185) said that the Canary lulav is included in the Torah's description of "kapos tmarin," and there is no reason to question its acceptability

determine the meaning of the word "tmarim." He felt that "tamar" actually refers to the tree itself and not the fruit, which is called dvash. Hence, the pasuk "Tzaddik katamar yifrach — The righteous shall flourish like the palm tree" (Tehillim 93: 13). The meaning of tamar in this pasuk is not the date, but the tree. According to Ray Shlomo Zalman, the Canary and the true date are very similar in appearance and the lulavim they produce are very similar, such that only experts can tell them apart. Thus, he ruled, it was an acceptable species.

Furthermore, Chazal warned against using similar but pasul varieties such as tzini har barzel (whose leaves did not fully grow) and esrog hakushi (black esrog) (Succah 29b; 34b) and they did not mention the Canary. Ergo, it must be acceptable. Finally, it is known that the Torah spoke in human language, and the average person certainly calls the Canary a palm tree just like he does a true date.

<mark>in</mark>deed very similar to a standard palm. The fruit is similar-tasting and is simply smaller

7 Tishrei 5774 | September 11, 2013



Ray Yaakov Ariel (Emunas Itecha, vol. 13, Cheshvan-Kislev 5754) argues that a Canary is **877.987.7013** www.thermarid.com

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with larger pits. The differences in leaf color and structure are so insignificant as to be unnoticeable to the average person, so there is no reason to exclude Canary palms from being acceptable. Others who permitted the use of the Canary are Rav Ovadiah Yosef (*Yechaveh Daat* 1:67) and Rav Eliezer Waldenberg (*Tzitz Eliezer* 8:22).

Rav Moshe Feinstein (*Igros Moshe, Orach Chayim* 4:123) also ruled on the Canary. He said that in *hilchos kilayim* the distinguishing factor between species is the taste of the fruit. Therefore, Canary palms are certainly different from standard palms, especially given that their leaves are also different, and thus one should not use them for *lulavim*.

The Lulav Pirates The story of the reintroduction of date trees in the early days of the State of Israel reads like an espionage thriller. The best place to get saplings was Iraq, but Israel and Iraq had no diplomatic or trade relations. More than that, there was no way that the Iraqis would sell anything to the Jews. The Mossad had a solution. It sent a few agents to Iran, posing as French businessmen. After several months of confidence building, the Iranians agreed to serve as interlocutors with the Iragis. The Israelis purchased 75,000 saplings and asked that they be shipped to Egypt. Before arriving, the ship's manifest was changed to direct it to France. In an amazing turn of events, "pirates" boarded the ship in the Mediterranean and stole exactly one thing: date palms. These saplings "mysteriously" turned up in Haifa and were used to rekindle the now very successful Israeli date business in both the Arava and the Beit She'an valley. The climate

and soil in both of these places is ideal for date palm cultivation.

That was the beginning of the Israeli date industry, but the mass production of *lulavim* would take years more to develop. Just what held the industry back? And from where did Israelis get their *lulavim* before they became widely available? We decided to find out.

For many years, farms and kibbutzim across Israel grew date trees only for their fruit. Indeed, farmers were hesitant to harvest *lulavim* out of fear that the process would impair their trees' ability to produce dates. Thus, throughout the 1970s, the vast majority of Israeli *lulavim* were brought from the Sinai as well as from neighboring Arab countries. In the 1980s, however, the Jewish growers understood that harvesting the *lulavim* was a win-win situation. It actually does not hurt the date yield, helps provide locally grown *lulavim*, and provides the growers with a secondary income source from the same tree.

The single-largest Jewish producer of *lulavim* in the world today is Kibbutz Tirat Zvi, a religious community located in the Jordan Valley, ten kilometers south of Beit She'an. It was founded in 1937 by Polish, Romanian, and German Jews and is named after Rav Zvi Hirsch Kalischer, a leader of the Chovevei Zion movement. In its early days, and particularly during the War of Independence, it faced repeated attacks by armed Arab mobs. Today, it is a serene, tranquil place with about 800 inhabitants.

Tirat Zvi cultivates nine breeds of dates and has planted approximately 23,000 trees, of which about 350 are male. Moshe Zakai, the *lulav* maven on the kibbutz and a veteran of the business for the last 40 years, says the number of trees keeps growing. Unlike *esrog* trees that weaken and need to be cut down

and replaced every 15 years or so, date palms continue bearing fruit and producing fronds for many decades. Some of the *lulav* trees on the kibbutz are over 40 years old.

The first of the major revolutions in the *lulav* business happened in 1978, when an American yeshivah student named Shabsai Kubin came to the kibbutz from Tzfas in order to find the perfect *lulav*. He examined numerous *lulavim* in an attempt to find one that would meet every halachic stricture, and finally settled upon the hardy Iraqi breed known as the Deri. He found that the tips were closed, as required by halachah, and remained so even when hit on the ground. Every aspect of the Deri appeared to be designed with the halachos of *lulav* in mind.

He took about 100 of them to sell in Bnei Brak — and they were snapped up in a very short time. While the Deri is not the best breed for dates, it has proven to be a boon for the kibbutz's *lulav* business. Today, more than half of Tirat Zvi's trees are Deris. Despite the popularity (and hence extra cost), not everyone prefers a Deri lulav. The Zahidi breed, for example, is known for being extra thick and long and is preferred by certain Sephardic groups.

A Technological Leap Still, despite the efforts at Tirat Zvi and neighboring religious kibbutzim Shluchot and Merav, which also initiated date palm production, at the start of the new millennium the majority of *lulavim* in Israel were still being imported.

Jews around the world were held hostage each year by the Egyptian and Hamas authorities who threatened, and sometimes implemented, a ban on *lulav* exports. In an attempt to break the stranglehold Egypt had



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on the *lulav* market, the Israeli government decided to assist in the development of a solution. Scientists David Kenigsbuch and Nechemia Aharoni from the agricultural ministry's Volcani Institute, a taxpayer-supported operation, working together with the kibbutzim, have now perfected a method of preserving *lulavim* for many months.

Why is this important? Zakai explained that unlike dates, which all ripen in the same season, new *lulavim* grow throughout the year. (Interested to understand how fast they grew, Zakai says he and his colleagues once attached a tape measure to a *lulav* that was just starting to emerge. They found that it grew over three centimeters per day.) Without the ability to preserve them, only those *lulavim* on the tree the month before Succos could be sold, as they could only be stored for 30 to 45 days. To solve the storage problem, government scientists and the kibbutzniks collaborated to develop a system whereby the harvested *lulavim* are dipped in preservative, wrapped in plastic, packed 40 to a carton, and then stored in a temperatureand humidity-controlled refrigerators. This allows preservation for up to 12 months. The technique has been approved by rabbinical authorities of all streams and many of the kibbutzim have received Badatz hashqachah

on their *lulavim*, which includes safeguards like assuring they are not harvested on Shabbos, that workers did not eat bread near them on Pesach, and that all agricultural mitzvos are observed.

Today, the kibbutz workers, mostly from Thailand, inspect the trees every two weeks, starting about six months before Succos. They then harvest whichever *lulavim* are available, checking the entire height of the tree with a motorized cherry picker modified specifically for *lulavim* by Zakai.

With pride in his innovation, he invited us to join him as the cherry picker rose to the top of the trees. Or almost rose. It seems that us city dwellers are not as lean as the kibbutz workers, and the motor strained lifting all of us to the top. This year, Tirat Zvi hopes to provide over 100,000 of the 700,000 *lulavim* purchased in Israel. This Israeli technological innovation is helping to make Israel *lulav*-independent from our Arab neighbors.

The Lulay of Our Ancestors Shimon Bar Kochva, the Jewish general who headed the revolt against the Romans from 132 CE, had to outfit a Jewish army. Naturally, as Succos came, the troops needed *arba minim*. Despite the fact that the fighting was fierce, he made sure the

army was supplied. A spectacular letter, found in a cave in Nachal Chever, a few kilometers south of Ein Gedi, bears the general's order of procurement: "Shimon to Yehuda son of Menashe at Kiryat Arabiya: I sent you two donkeys so you can send with them two people with Yehonatan son of Ba'ayan and to Mesabala so they may load and send to your camp lulavim and esrogim. And you should send other people that are with you and they should bring hadassim and aravos. And you should make them fit [i.e., take trumos and maasros and send them on to the camp because the army is numerous. Be well."

So important was the imagery for the four species because it reminded them of the days of glory of the Beis HaMikdash, that Bar Kochvah actually minted a coin with them on it. The meaningful inscription of "l'cheirus Yerushalayim" — to the freedom of Jerusalem — meant as much close to 2,000 years ago as it does for us today.

The Midrash (*Pirkei d'Rebbi Eliezer* 19) says that just as the palm tree is lovely to behold and all its fruits are sweet and good, so too is the son of David beautiful and all his works are sweet and good before the L-rd. May he come speedily.





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