

Reviving Indigenous Seeds and Stories

The Palestine Heirloom Seed Library



By Nina T. McKee

I'm looking for Jadu'i watermelon seeds," Beit Jala native Vivien Sansour said to a farmer in Jenin several years ago. "The Jadu'i watermelon? That's practically as extinct as the dinosaurs," the farmer lamented.

And so illustrates the difficulty of Vivien's quest to find Palestinian heirloom seeds - prior to founding the *Palestine Heirloom Seed Library* in 2016, that is. The Palestine Heirloom Seed Library is Palestine's unique and autonomous heirloom-seed-saving library. Located in Beit Jala, the library is home to at least 20 species of seeds native to the area and has the mission to save and propagate these seeds, and the stories that come with them, in years to come.

Native seed varieties currently housed in the library include

spinach, arugula, carrot, tomato, white cucumber, beet, okra, corn, string bean, flowers, zucchini, and the Jadu'i watermelon - which Vivien did come across when a farmer friend pulled open a drawer full of tools, nails, and old batteries to reveal just a few seven-year-old seeds. Vivien has guarded these seeds as a prized possession, and this year she successfully planted her first Jadu'i watermelon in decades - which will enable her to save its seeds and continue to propagate it in future years.

Many of these seeds fall under the term *Baal*, which are exceptional for their adaptation to Palestine's climate. Baal is a term that dates back to the Canaanite era, when the Canaanites worshiped Baal, the god of fertility and destruction, with a rain prayer to give life to the plants. For the remainder of the season - long after the rainy season had ended - these plants lived off the

water captured in the soil - a type of self-irrigating, self-sustainable, highly adapted seed that humans have yet to masterfully replicate.

Given the increase in droughts across Palestine in recent years, the importance of revitalizing seeds with this capability is all the more time sensitive.ⁱ The Rural Advancement Foundation International explains, "Both biodiversity [found in native seeds] and capacity for adaption are critical in addressing global climate change, growing population pressure on food production, and the many challenges to our agricultural system yet to come."ⁱⁱ

An heirloom seed is a seed that has been passed down through generations - like an heirloom table or another antique that you may have heard the term applied to. "Heirloom" denotes the designated importance and stories attached to the item by our ancestors,

The Palestine Heirloom Seed Library in El Beir Arts and Seeds Studio in Beit Sahour. Photo by Vivien Sansour.





Arugula flower, about to seed.
Photo by Vivien Sansour.



Baal baladi zucchini. Photo by Vivien Sansour.

which is equally as important for heirloom seeds as it is for other heirloom items. Indeed, our ancestors are to thank for having chosen and saved the best varieties of any given seed. This seed selection gives us the unique crop varieties that have remained in existence to this day - if, indeed, they have been able to survive.

Worldwide, the loss of heirloom seeds is at a historic high, with estimates that up to 90 percent of all crop varieties have been lost in the last 100 years.ⁱⁱⁱ A number of reasons are behind this, but the two biggest contributors are climate change and the increase in

agribusiness.^{iv} Multinational seed and chemical corporations have increased control of the seed marketplace and created a system dominated by genetically modified (commonly known as GMO) seeds. In 2014, it was reported that the top-ten seed companies control 94 percent of the global seed market, with just three companies-Monsanto, DuPont Pioneer, and Syngenta - controlling over 50 percent.^v Though GMO seeds generally produce higher yields, their lifespan is usually limited by corporate regulations to a single growing season; they require high chemical inputs - generally manufactured and sold by the same companies that sell the seeds - that are hazardous to human and environmental health; and GMO seeds are tailored to produce under ideal growing conditions.^{vi,vii} Heirloom seeds, on the other hand, can be grown with few chemical inputs and have adapted across generations to be resilient to less-than-ideal conditions, such as droughts or flood - just think back to Palestine's indigenous Baal seeds.^{viii}

Naturally the Israeli occupation of Palestine adds its own complicated layers: "Since 1967, Israel has drowned the Palestinian agricultural sector with chemical pesticides, herbicides,

and fertilizers. Promotion of mono cropping has left farmers vulnerable to middlemen who dictate prices and crop varieties; and pushed the agricultural sector towards labor-intensive crops - strawberries, cucumbers, and tomatoes - produced in chemically heavy greenhouses using cheap labor."^{ix} Despite exhaustive research efforts, no official estimates on the exact number or percentage of heirloom seeds lost in Palestine could be found, but the impact of Israeli occupation suggests that the rate has been consistent with the rate of seed loss worldwide. The loss of heirloom seeds has a devastating effect on the environment, human health, farmer autonomy, and especially, the culture and stories that each seed represents.^{x,xi}

The cultural significance of these seeds is what Vivien most wants emphasized whenever attention is turned to the Palestine Heirloom Seed Library. "We're on a mission to preserve culture through the culture of food; through biodiversity and through all the traditions that are linked to each seed's biodiversity. What makes our project unique is that we are excavating not just the actual seed, but the seed as a symbol of all the cultural practices - songs, language, stories - that go along with the seed. We want to preserve the stories and memories attached to the seed, including all the knowledge that our ancestors had of the many ways this seed could be used."

For example, the Jadu'i watermelon tells us a beautiful story of fruits that grew so large that women gave birth in the "privacy" of watermelon fields. Some also sought refuge among the huge melons during wars, and many farmers remember harvesting and storing the watermelons underneath their beds to save for special occasions during the winter months, long after the harvest had finished. "The



Baal tomatoes. Photo by Vivien Sansour.



Vivien Sansour in front of the seed library in El Beir.
Photo by Dirk Jan Visser.

Jadu'i watermelon is symbolic of Palestinian farmers' lived experiences," Vivien shares. "It has stayed carved in people's memories until this day. When I worked with farmers in Jenin, everyone had a story to share from their parents' or their own experience of a once-loved and enjoyed melon that shaped much of the culture at some point."

Vivien continues: "When we choose any of these seeds, like the Battiry eggplant, for example, we're choosing an integrated system of food production, cultural exchange, and cooperation. The eggplant of Battir isn't great just because it's the eggplant of Battir. It has a history of agricultural and social systems behind it that are unique: the terraced land plots and the irrigation systems, the cooperation of the community that allowed the plots to thrive. What makes [Battir] a [UNESCO] World Heritage Site is

Heirloom seeds are an element of culture and a symbol of traditional and heritage cultural practices that go beyond food songs and stories.



The seed library has ambitious plans for 2018.



not just that it has these canals; it's the way the canals have been managed for generations. Families communicated and cooperated to ensure that each terrace had enough irrigation - they would change the flow of water each day to ensure fair practice and fair irrigation. That is what is most amazing about the Battiry eggplant."^{xii}

And of course, the famous *faqous* - cousin of the cucumber -- has its own day of celebration in Beit Sahour. Usually held in July, the festive day includes a concert during which seemingly bottomless baskets of *faqous* are passed around to spectators.

Which brings us back to the importance of the Palestine Heirloom Seed Library to revitalize the once-rich heirloom-seed varieties in Palestine.

Note the intentional use of the word "library." While seed "banks" are in existence throughout much of the world, including in Palestine, Vivien has intentionally founded a library: she hopes that people who take seeds from the library will propagate and save them, and then return with more of that variety. She explains, "This communal sharing of seeds is both symbolic and practical; it is an important piece of our ancestors' culture of farming, and it is the only hope we have of saving ourselves and our agricultural environments - something we must do together. You can say that everyone's grandmother had her own seed library of some sort - only it looked more

like an old tin box of Quality Street chocolates that was turned into a seed-saving treasury."

Vivien has worked tirelessly to bring this project to fruition. Upon founding the Palestine Heirloom Seed Library, she had big dreams for propagating seeds in conjunction with acknowledging the cultural significance behind each seed. This is all set to happen this year. The Palestine Heirloom Seed Library is excited to begin a project specifically focused on propagating four varieties of seed: Jadu'i watermelon, white cucumber, *habeh* soda wheat, and *baladi* tomato. This past year, the library received a grant from the California-based New Field Foundation, which will engage 20 farmers around Palestine to grow these four varieties. The project will last one year - enough time for a full season of growing, harvesting, and seed-saving - and will involve both farmer conferences for knowledge-sharing as well as community meals that bring people to the dinner table to talk about the environmental and cultural importance of these indigenous varieties. Four dunums of wheat have already been planted in Nus Ijbail, Shawawreh, and Jenin, and this spring, farmers will begin to plant the summer-crop varieties.

The project will serendipitously coincide with another initiative planned by the Palestine Heirloom Seed Library and El Beir Arts and Seeds (a sister project of the library): The Traveling Kitchen Project *El Arabayeh*.^{*} The Traveling Kitchen is a portable wooden unit with all the functionality of a kitchen, and it will travel around Palestine to ten communities with the goal of bringing people from all walks of life to the table to share meals made from heirloom varieties, and to discuss the many aspects of food: environmental, cultural, social, political, and personal. The Traveling Kitchen will take off in early March, beginning also in Nus Ijbail with a meal of heirloom fava beans, and travel to one community each month. Anyone in the area is encouraged to join these meals.

Thanks to the Palestine Heirloom Seed Library, 2018 is sure to be a pivotal year for heirloom-seed recuperation. "This project is an important moment in the making of modern agri-cultural history," Vivien emphasizes. "Like many other women around the world, I believe that through our land and heirloom seeds, we can restore our communities as we regenerate our spirit, our language, and our culture. This project is about loving ourselves and where we come from, again. This is the essence of the Palestine Heirloom Seed Library."

Nina T. McKee is currently based in the United States but has spent the last few years traveling internationally to support human rights and environmental justice issues.

^{*}You can follow the journey of the Traveling Kitchen and the work of the Palestine Heirloom Seed Library on Facebook by "liking" the pages of *El Beir, Arts and Seeds* or *The Palestine Heirloom Seed Library*.

"In a global trend of industrializing agricultural land, farmers in Palestine are not unique: Growers all over the world have been under attack with attempts to weaken their autonomy over food production and increase their dependency on banks, multinational corporations, and agribusiness giants. Whether in Haiti, Honduras, India, or Palestine, small-scale family farming represents the last frontier of resistance to a worldwide capital-driven political system that dilutes people's identities and strips them of their food sovereignty in order to ensure elite political and economic dominance of both human and natural resources."^{xiii}

ⁱ United Nations Palestine Team, May 2014, UN Sustainable Development, "Impacts of Climate Change on Water Resources in Palestinian Territories," <https://sustainabledevelopment.un.org/content/documents/388208.%20Palestinian%20Territories.pdf>.

ⁱⁱ S. Marlow, "Have We Reached a Tipping Point on the Loss of Seed Biodiversity?" November 4, 2014, Rural Advancement Foundation International, <http://rafiusa.org/blog/tipping-point-loss-seed-biodiversity/>.

ⁱⁱⁱ Food and Agriculture Organization, Food and Agriculture: Social and Development Department, "What is Happening to Agrobiodiversity?" 2000, <http://www.fao.org/docrep/007/y5609e/y5609e02.htm>.

^{iv} Ibid.

^v S. Marlow, "Have We Reached a Tipping Point on the Loss of Seed Biodiversity?" <http://rafiusa.org/blog/tipping-point-loss-seed-biodiversity/>.

^{vi} A. Coates, "Global Seed Vault: The Arctic's doomsday depository that could save plant life from climate change," *The Independent*, July 2, 2017, <http://www.independent.co.uk/news/science/archaeology/features/global-seed-vault-the-arctic-s-doomsday-depository-that-could-save-plant-life-from-climate-change-a7810936.html>.

^{vii} B. Haumann, "Organic and GMOs," Organic Trade Association, 2017, <https://www.ota.com/organic-101/organic-and-gmos>.

^{viii} Ibid.

^{ix} A. Tartir and V. Sansour, "Palestinian Farmers: A Last Stronghold of Resistance," Al-Shabaka: The Palestinian Policy Network, July 1, 2014, <https://al-shabaka.org/briefs/palestinian-farmers-a-last-stronghold-of-resistance/>.

^x H. Al-Jibehi, "52 Profiles on Agroecology: Local Seed Bank in Palestine," Food and Agriculture Organization and Union of Agricultural Work Committees, 2016, <http://www.fao.org/3/a-bs178e.pdf>.

^{xi} M. Elagraa and M. Elkhafif, *The Besieged Palestinian Agricultural Sector*, United Nations Conference on Trade and Development: Assistance to the Palestinian People Unit, 2015, unctad.org/en/PublicationsLibrary/gdsapp2015d1_en.pdf.

^{xii} *Palestine: Land of Olives and Vines – Cultural Landscape of Southern Jerusalem, Battir*, United Nations Educational, Scientific and Cultural Organization, UNESCO, 2014, <http://whc.unesco.org/en/list/1492>.

^{xiii} A. Tartir and V. Sansour, "Palestinian Farmers: A Last Stronghold of Resistance," <https://al-shabaka.org/briefs/palestinian-farmers-a-last-stronghold-of-resistance/>.