

Taggart Siegel Seeks to Seed an Agricultural Revolution

by April Thompson

For more than 30 years, Taggart Siegel has produced award-winning films on little-known aspects of the natural and cultural world. His diverse documentaries range from the story of a Hmong shaman immigrant adjusting to American life to a Midwestern organic farmer that salvaged his family's farm.



Siegel's latest film, *Seed: The Untold Story*, follows global seed keepers from Minnesota to India battling multinational agribusinesses in a quest to protect our agricultural heritage and food sources—ancient seeds passed down through untold generations. Interviews with farmers, ethnobotanists and activists explore the importance of the genetic material that these tiny time capsules carry.

Siegel is the founder and executive director of Collective Eye Films, a nonprofit media company in Portland, Oregon. He co-directed and produced this latest offering with documentary filmmaker Jon Betz, with backing from Academy Award-winning actress Marisa Tomei.

Why does the colossal loss of food crop diversity during the past century matter?

Up to 96 percent of seed varieties have been lost since 1903. During this period, we have destroyed the infrastructure of traditional agriculture: 10,000 years of seeds saved from families and farmers. It threatens our survival. We

can't rely on genetically modified seeds to see us through climate changes. We need non-genetically engineered seed varieties like the thousands of different types of rice grown in India to be able to adapt to extreme events like floods and droughts.

Universal responsibility to save seeds began to dwindle in the 1920s, when hybrid corn crops came onto the market, promising higher yields; instead of growing crops from seeds saved, borrowed or shared with neighbors, farmers bought seeds from stores. In the 1990s, huge corporations bought up some 20,000 seed companies, and the number of cultivated seed varieties dropped precipitously. Ten agrichemical companies now control more than two-thirds of the global seed market.

How do hybrid seeds differ from open-pollinated seeds?

You cannot save a hybrid seed; if you try to use it, the results are unreliable. Hybrids are engineered to be planted for one year only. With open-pollinated and heirloom seeds, you're planting reliable seeds saved from year to year, generation to generation, bred for the consistency of their qualities. Indigenous people in Mexico's Oaxaca Valley, for example, have successfully cultivated local seeds for at least 8,700 years, right up to today.

Hybrids require high levels of chemical inputs to produce. Illustrat-

ing the contrast, Hopi corn, grown for thousands of years, requires little water and contains much more protein than today's commercial crops, without poisoning the land with heavy industrial inputs. The Hopi think of seeds as their children, intimately connected with their heritage and culture, so they protect them. Beyond big, strong crops, farming is a spiritual act.

Why do so many farmers voluntarily choose hybrid seeds, given the troubling issues involved?

Most farmers just want streamlined labor and the biggest yield. Often, commodity crops using commercial seeds and chemical fertilizers have the biggest yield and make them the most money, even though severe downsides like the loss of flavor and nutrients mean it's ultimately not the best result.

In India, more than 250,000 farmers have committed suicide during the past 20 years to escape onerous debts accrued to purchase industrialized agricultural inputs. An Indian seed salesman interviewed for the film despairs, "The seeds we sell don't taste good and require so many chemicals that many farmers kill themselves."

What is the seed-saver movement achieving, and how can everyday gardeners and citizens take action?

Seed libraries and banks are critically important because the seeds are adapted to the local environment. Seed libraries have multiplied from only a handful a few years ago to as many as 300 located in towns across America today. Public libraries check out seeds to plant in your garden, asking only that you return harvested seeds for others to enjoy. Farmers can now "back up" their seeds in local seed banks, which are also becoming important educational resources to teach students about these issues.

To locate a screening or purchase a DVD of the film, visit SeedTheMovie.com.

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