



LIVING SEEDS supports breeding programs of open pollinated varieties only. Why – and what does that mean?

Life is a miracle that already represents itself in seeds. Seeds re-establish themselves over and over again, being the most tiny, however powerful cause for reproduction and preservation of plant life. How does that happen? Some plants pollinate themselves; others profit from wind or insects to help them pollinate before they can produce fertile seeds. Those seeds are then disseminated with the help of the wind, the flower embedded stigma, with the help of animals, and via humans. A single fertile seed can create a new plant, which, if pollinated successfully, produces numerous seeds which again can produce other plants — provided that their environment permits this. Despite the lavish abundance of fertile seeds that nature keeps providing, every single reproduction, every germination and flowering, is a miracle and ultimately essential to all life on this planet.

What does open-pollinated mean?

Old and traditional varieties are usually open-pollinated. Their seeds show the same qualities and characteristics as the plants from which they originate. These seeds bear no copyright: they can be harvested and sown by gardeners and farmers again and again. Open-pollinated varieties expand biodiversity by producing plants with naturally selected characteristics that are reproducible and can adapt themselves to environmental changes and soil conditions.

Hybrids: efficient but defective

Today, there are more and more plants which have been maltreated and manipulated by humans in a way that their offspring show intended genetic defects. In fact, an astonishingly large part of the fruits, cereals, and vegetables we eat today come from such plants — from so-called hybrids. Hybrids endanger natural reproduction by making the survival of natural resources entirely dependent on companies with the knowledge of how to reproduce them. Inbreeding processes result in nonrecurring effects on hybrid plants, such as a particularly high yield, special colours, or shapes — such as cylindrical, straight grown, orange, or particularly thick carrots. However, unlike open-pollinated varieties, hybrid plants cannot pass these properties on to their next generation — regardless of whether their seed falls on fertile soil or not. Without human interventions and knowledge of the original families, these plants are not able to reproduce. In a way they are pretty but impotent.



How are new, open-pollinated plant varieties being developed?

In organic plant breeding, the plant environment, and human hands (see symbol above) play an important role. We think gardeners, farmers, and breeders should be able to allow plants to produce or reproduce seeds themselves, without manipulating the nature of the plant and without risking its integrity. Different plant varieties show different characteristics of a plant. Over the course of millions of years, nature has developed an unimaginable diversity without human intervention — because seed adapts itself to its environment. However, today, due to the changing environmental and climatic conditions breeding has become more and more important. Water shortages such as floods, storms and heat waves threaten to interrupt the process of reproduction. The task of the organic breeder is to select, cross, emphasise and improve natural characteristics. In doing so, they accelerate the natural adaptation processes and direct the development of a plant in a certain direction. This results in new varieties that are still suitable for reproduction: open-pollinated varieties.

What is so special about biodynamic breeding?

Biodynamic breeding focuses on special work processes such as participatory breeding with farmers, breeders, and consultants. Human interventions and natural forces are being strengthened, for instance by artistic means like eurythmy and sound patterns. This is in stark contrast to capital-intensive, laboratory-technological breeding practices, which manipulate the genetic endowment of plants, deliberately suppresses natural and identity driven development, and tie farmers and gardeners to powerful seed companies through patent and license constructions.

All seeds of our Living Seeds association are open-pollinated and therefore free from any genetic manipulation. Our breeders respect and guarantee plant integrity. The result is a valuable contribution to biodiversity.

Do you want to support our work? Then feel free to spread the word to family and friends, <u>become a member of our association and make a donation</u>.