



Gardening in keeping with
NATURAL AGRICULTURE

Guidelines for the beginner


Shumei

INTRODUCTION

Natural Agriculture is an approach to agriculture in which the natural capacity and wisdom of nature are respected. It is more than a system of food production and gardening – it is a way of life. Natural Agriculture eschews the use of all chemicals, fertilizers, pesticides and other additives. This approach was developed in Japan in the 1930s by Mokichi Okada, the founder of Shumei. Today it is practiced around the world by thousands of participants in the Shumei Natural Agriculture movement.

For those of you who would like to practice Natural Agriculture for the first time, we have created this booklet to describe some of its principles, approaches and basic methods.



GETTING STARTED

Shumei Natural Agriculture does not stress specific farming techniques, but rather focuses on the ability to understand and work with the individual conditions of a particular locality. The farmer is guided to understand the farming method that would work best for a particular soil and climate, taking into consideration a vast array of conditions. But there are a few universal guidelines.

The health of the soil and seeds are two essential ingredients for healthy crops. The third essential factor is the mental attitude of the grower. A positive, caring attitude will yield positive results. A skeptical, fearful or doubting attitude will lead to difficulties. Thus, these three factors are the basic conditions of Shumei Natural Agriculture:

1. Pure soil (without fertilizers or agricultural chemicals)
2. Pure seed (saved from Natural Agriculture crops)
3. Pure mind (gratitude and a caring attitude toward the soil and crops)

The blend of these three elements, with the addition of light and water, generates the power to grow the highest quality crops.

HOW IS NATURAL AGRICULTURE DIFFERENT FROM ORGANIC FARMING?

Natural Agriculture deviates from organic farming in its definition of what can be added to the soil. The Natural Agriculture system developed by Mokichi Okada does not allow the use of organic herbicides, pesticides or fertilizers, such as animal manure. Natural Agriculture teaches that minimal intervention in the growing process is best. Nature is fully capable of revitalizing itself; therefore additives of any kind are unnecessary. Pure, unenhanced soil contains all the nutrients it needs to produce plants. Other natural elements that are not used include minerals made from natural stone; compost from leftover food including coffee grounds; charcoal, often used to clean water; charcoal vinegar or red pepper water, which is sometimes used for pest control. Natural Agriculture does not recognize any insect as a “pest”. The Natural Agriculture method promotes a more comprehensive understanding of the role of insects and how to maintain their balance so they do not become excessive and damage plant life.

Natural Agriculture does permit the use of natural compost, such as grasses and leaves found in the immediate area of the crop cultivation, or compost made of vegetable debris from Natural Agriculture crops. This compost has a purer composition and is used for three important functions:

1. It improves water retention.
2. It helps to keep soil temperate.
3. It softens the soil.

Fertilizers, like antibiotics, have the effect of weakening the immune system so that crops can no longer fight off insects on their own. It takes time for plants to build up resistance, but over several years the Natural Agriculture farmer will see insects and plant disease decrease significantly. Patience is needed to work with the crops so that they can resist pests



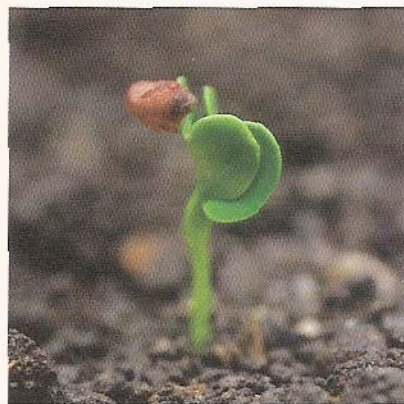
through their own natural resources, without the aid of toxic chemicals. The key factors here are patience, commitment to the Natural Agriculture principles, and an attitude of working with nature, not seeking to control or combat it.

Cultivating an attitude of respect and listening to nature will help the farmer navigate through many decisions concerning planting – when to grow what types of vegetables, how deep to sow the seeds, how to till the soil, whether or not to use raised beds, and what kind of care they need. These are secondary issues, which are easily learned once you begin working in partnership with nature.

KEY GUIDELINES

Although different crops will need varying degrees of sunlight and water, most need full light and a good amount of moisture. These are key factors to keep in mind when deciding on a location for a vegetable garden. It is also best to select a spot where pesticides and fertilizers have not been used. If there is no alternative, then it is just a matter of time until these chemicals wash out of the soil. It may take a few years, but each year you will see progress as the plants gain strength and build their own internal resistance to pests. If you don't have space for a garden, crops can be grown in planter boxes or wooden boxes. For good runoff of water, make holes in the bottom of the boxes and fill 1/4 or 1/5 of your boxes with gravel. This will prevent the roots from getting too wet and rotting.

Each vegetable has its own germination temperature – thus, some products are grown in warmer climates. Seeds won't germinate without the needed temperature; therefore, you should remember that the season for sowing seeds differs according to the region and climate. Usually seeds are planted after the danger of frost has passed, but experienced gardeners or farmers in your region can guide you as to the best time for planting each crop.



PLANTING SEEDS

There are many methods for sowing seeds, depending on the individual farmer. Seeds do not need to be planted deep in the soil. In nature, seeds fall to the ground and germinate without any additional soil being placed over them. We can learn from this and realize that only a little bit of soil is needed. The advantage of covering the seed with soil is that it will keep in the moisture. A good rule of thumb is that the thickness of cover soil should be about twice or three times that of the seed. There is no rule for seed spacing, but plants do need some space to keep them from touching and crowding each other.

Trial and error is the best way to develop effective cultivation techniques for your crops. The important thing is to observe and learn from nature, and to care for your crops so that you are sensitive to their condition and needs.

The time needed for germination varies from vegetable to vegetable. A main concern should be to keep the soil surface from drying out. Planting before a rain is ideal for germination. Otherwise, water the seeds just after they are planted. Regular watering is very important, especially just after planting. If possible, place fallen leaves or grass around the roots of the vegetables. This will help keep the soil from drying out and the natural compost will enable you to water a little less frequently.

CARING FOR PLANTS

Plant growth is hampered when weeds begin to grow around the crops. Weeds take up water and shade the crops. If the weeds are not overcoming the crops, weeding is not essential. If they are inhibiting the growth of the crops, it is best to weed. Weeds do play a role in enriching the soil so it is not necessary to rid the soil of all the weeds – just enough so that they don't inhibit plant growth.

As the plants grow, certain techniques will help improve efficiency – such as pruning unnecessary branches, using poles to ensure straight plant growth and using strings to prevent crops like tomatoes from touching the ground. These techniques help guide the natural growing process, rather than control it. By adhering to a few basic principles the farmer can observe and determine when to step in

and aid the plants and when to leave them to their own devices. Plants are living beings and we need only observe, encourage and nurture their life force.

HARVESTING AND SAVING SEEDS

Once the crops are mature they will yield their own seeds. According to Natural Agriculture, home-grown seeds from Natural Agriculture crops are the best seeds to use for the following year's crop. Each year the ability to harvest seeds will improve, as will the purity and the adaptability of the seed to the local environment. The second-year seed will be better than the first-year seed. The fifth-year seed will be better than the second-year seed, and the tenth-year seed will be better than the fifth-year seed.

Some seeds are easier to identify than others. Vegetable plants produce flowers and after the flowers die, the fruits of these plants, containing new seeds, appear. The seeds of squash are easy to find, while those of lettuce, which are very small and light, are difficult to find. Leave the best fruits of vegetable plants on their branches after they have fully ripened, then gather the seeds from them. Dry the seeds on paper and keep them in a bin or a glass container.



Before you are able to collect your own seeds, or if you cannot find seeds from Shumei Natural Agriculture crops, you can use local variety seeds or heirloom (open-pollinated) seeds. Never use genetically modified (GM) seeds as they have had their DNA manipulated through genetic engineering. You should also try not to use F1 (filial 1) seeds, which are improved-variety seeds or hybrid seeds. Though they may be superior to traditional seeds in productivity and uniformity, the crops they grow don't easily produce seeds, and the seeds they produce are likely to have a different nature. They don't maintain their distinctive qualities.

NATURE IS YOUR ULTIMATE GUIDE

The most important principle to remember in cultivating vegetables is to observe nature and experiment with different cultivation techniques. Nature will guide you and, based on the results, you will learn what works best for your region, climate, soil type and natural setting. Each farmer is a researcher, testing out different methods until nature shows him or her the one that works best for that particular site. Learn to observe, assimilate and respond. Above all, be respectful and caring toward nature.

A SPECIAL NOTE TO PERSONS NEW TO NATURAL AGRICULTURE

This approach to agriculture will take time, so be patient in this endeavor because the rewards will be worth it. In the end, not only will you taste the difference in the herbs, fruits and vegetables produced by Natural Agriculture, but you will also have the assurance that they do not contain harmful chemicals that are bad for your health and that this way of farming is very environmentally friendly. Through a commitment to the principles of Natural Agriculture, you will learn to work with nature in the most rewarding manner, rather than trying to control it.

The guidelines in this booklet are meant to give you a better understanding of how the philosophy of Natural Agriculture can be applied to your own garden. However, it can also be applied to your everyday life. The more you learn to observe and respect nature, the more you will feel connected to it and value other living beings and the environment around you.

There are two books published on Shumei Natural Agriculture, *The Message in a Seed* by Dena Merriam and *Farming to Create Heaven on Earth* by Lisa M. Hamilton. To learn more about Natural Agriculture or how to obtain these books, please visit www.shumei-na.org.

