

Announcer: "Today for our Special Report, we will visit an orchard in Yamanashi Prefecture where cherries and peaches are produced without using agricultural chemicals. The key is water."

Reporter: "One step into the commercial district here and we see fruits, the taste of autumn, displayed in abundance. Peaches, grapes and pears- in vivid color and perfect shapes - enhances one's appetite. They say that it is necessary to use agricultural chemicals and fertilizers to grow such perfect looking fruits. They know, of course, that bugs and insects don't want to miss out on the delicious food that human beings eat. They bite off the leaves and go inside the fruits."

[on screen] Cherries infected with mildew

Report: "Farmers get into trouble because of mildew. The commercial value of their crops drop and their income decreases. Therefore, farmers cannot help using agricultural chemicals like pesticides. Cherries need to be sprayed with agricultural chemicals six to seven times before they are harvested. For peaches, that number is 10 to 15 times, and for grapes, 16 times. The dangerous effects of agricultural chemicals have become a concern."

[on screen] Highway

Reporter: "However, after hearing about growing fruits without using such agricultural chemicals, I drove to Shirane-cho, Yamanashi Prefecture where a scene of orchards of cherries and peaches and hills of grape vines spread across the landscape before me."

[on screen] Mr. Tezuka

Reporter: "This is Mr. Yasuhiro Tezuka who is taking up the challenge of growing fruits without chemicals. He is driving a strange vehicle to the Agricultural Coop."

Mr. Tezuka: "This machine makes high alkaline water and hyperoxidized water by electrolysis."

Reporter: "Adding a small amount of salt to tap water and initiating the process of electrolysis, you can create an unlimited amount of strongly disinfectant, hyperoxidized water. Mr. Tezuka came to fetch this water."

Mr. Tezuka: "Today, I'm planning to eliminate gray mildew with this water."

Reporter: "Mr. Tezuka is well known in Shirane-cho as a specialist with a green thumb for growing fruit. For the past thirty years, he has been concerned with the problem of agricultural chemicals. He wondered if he could grow safe fruits that would not harm the human body. His dream came true with this water."

Mr. Tezuka: "This has a pH of 2.6, so you can disinfect with this water."

Reporter: "Will bacteria actually be killed? Hyperoxidized water was sprayed on some infected leaves."

[on screen] Leaf

Reporter: "Did you see that? Let us look at it again in slow motion. The area of the leaf where the water made contact is the only area without bacteria. In the mid-June of this year, the cherries ripened, a scene which had been Mr. Tezuka's dream and many people who heard about it came to visit him."

[on screen] Woman

Woman: "This is my first cherry picking. It tastes just wonderful. Sweet!"

[on screen] Left: Cherries produced in other prefectures Right: Mr. Tenrka's cherries.

Reporter: "Compared with cherries grown in other prefectures, both the size of the fruit and the price are better. Mr. Tezuka's cherries also taste better. Mr. Tezuka operates a 4000 tsubo (about two acres) orchard where he has 180 cherry trees, 110 peach trees and 50 grape vines. Although he realized that he could disinfect his fruit trees with this safe and harmless water, it was not easy for him to make up his mind to use it."

Mr. Tezuka: "I was not 100% sure that I could succeed. I have to make living, you know. I was worried. I spent many sleepless nights."

Reporter: "In the switch from agricultural chemicals to harmless water, how did Mr. Tezuka's farming change?"

Reporter: "First, his attire changed. When using agricultural chemicals, he used to protect his face with a towel over a protective mask, wear long boots, a thick raincoat and gloves, and a hat. Now he works in his regular working clothes."

"He adds a large amount of organic fertilizer and leaves plenty of space in between the plants. He sprays hyperoxidized water up from the underside, aiming to clean out bacteria and insects on the backs of the leaves. He uses both Chinese herbs and hyperoxidized water for eradicating insects."

Mr. Tezuka: "I use Chinese herbs to distract the bugs, to get them to go away."

Reporter: "At last, we have discovered the secret of growing perfect fruit!"

Mr. Tezuka: "This operation inserts alkaline water into the soil. By doing this I intend to grow thick, strong leaves."

Reporter: "Trees that do not receive alkaline water are more infected with mites."

Reporter: "We tested the sweetness of the fruits."

[on screen] "Sweetness measuring device, showing 15.4."

Man: "Wow, this is amazing."

Reporter: "Mr. Tezuka's cherries are rated excellent. How about his grapes? They measure 23.3. Intensely sweet grapes were grown!"

Mr. Nakagome, JA Nishino Agricultural Coop: "Mr. Tezuka grows cherries, peaches and grapes without using agricultural chemicals. Here are the test results of his fruits tested for residues of agricultural chemicals by the Sanitation & Pollution Research Center. They show zero chemical residue."

Mr. Hasebe, Head of JA Nishino Agricultural Coop: "My hope is that our entire area will be able to grow fruits without chemicals."

Reporter: "Mr. Tezuka who realized his dream of growing fruits without using chemicals is now enthusiastic about his new idea to help increase the number of growers like him."

Announcer A: "This water is very effective. Unlike agricultural chemicals, it leaves no residues, so it appears to be very good for the environment."

Announcer B: "Some people are worried that since it is hyperoxidized water, it could have the same effects as acid rain. This water is said to revert to regular water once it contacts the ground."