

## “A World Unknown to Me”

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“What!! 250 times bigger!”

When I found the microscope, I couldn’t stop myself from saying that. If something I see with my eyes is made 250 times bigger, what is it going to look like? I felt so thrilled that I wanted to look at many different things through the microscope right away.

I found out that microscopes have two observation methods, the first called *tōka*, which casts light from below, and the second called *rakusha*, which casts light from above. My Grandpa and Grandma grow vegetables at their home, such as onions, okra, and cherry tomatoes, so I decided to get eleven species of them for my observation.

For *tōka* observation, we make a preparation slide that holds a thinly sliced specimen between the microscope slide and a cover glass with one drop of water added. In five days, I made 57 preparation slides. When I made them, I used my left hand to hold down what I wanted to cut, and used my right hand to slide the blade of a sharp box cutter toward me, cutting the sample thin right at the tips of my left fingers, which made me feel quite nervous because I thought I might cut my own hand. When I put the cover glass over the preparation slide, air and water bubbles sometimes got in so that I had to do it over many times.

“Now I’m completely prepared!! I can finally do the observations,” I thought, but then it was difficult to operate the microscope, so it took me more time again.

I could not wink or close only one eye, so I used my left hand to hold my left eye closed, while I used my right hand to adjust the focus and to move the preparation slide. Even when I moved the slide a little bit, the specimen got far away out of the frame, and at times moved upward, downward, left, and right, opposite to the direction of my operation, which rubbed me the wrong way, because I couldn’t bring to the center what I wanted to observe. But I gradually got used to it, and felt a little bit like having become a research scientist, which made me happy.

As I looked through the microscope, the vegetables somehow appeared to me like Mount Fuji, a map of Japan, people’s faces, and planets like Mars and Jupiter. On the underside of a leaf, I could see holes called “stomata,” which adjust water in the plant. I looked them up in an encyclopedia and was more than amazed when I learned that plants too are “breathing” just like us humans.

“I want to look at more things! I want to find out more!” I thought, and put under the microscope the T-shirt I was wearing, then looked through the lens:

“Woah!! What’s this?”

I felt as if my eyes got twice as big as before. It was because I saw something I did not imagine. It seemed to resemble something...

“Oh, I know what it is! It’s *harusame* salad!!”

I could see the fine weft and warp woven together, each and every yarn appearing thick and shiny.

The world seen through the microscope was a world I had never seen before, a world of wonder spreading out vast, making itself interesting because it cannot be seen with the naked eye. If things are magnified 500 times, or even 1000 times, how would they look? What new discoveries can I make? Just thinking like that, my dream grows bigger and bigger. I wish to keep looking into the world of the microscope yet unknown to me.