

## Takayama-sha Sericulture School

Takayama-sha Sericulture School was established in 1873 to teach young men living in the area the basic knowledge and specialized technical skills required for sericulture, the breeding and raising of silkworms. It was founded by Takayama Chogoro (1830–1886), then the village headman of Takayama, at his ancestral home. It is included in the 2014 UNESCO World Heritage listing “Tomioka Silk Mill and Related Sites.”

Chogoro set up the school to develop a more effective method of raising silkworms, which he believed would allow people in his village to increase their income. Silkworms are delicate and can sicken or die in the wrong conditions. Chogoro believed that if farmers understood the optimal conditions for silkworm raising, they could reproduce those conditions and increase the quality and quantity of the silk produced.

He focused on improving ventilation and controlling temperature and humidity, developing the *seion-iku* (“clean and warm nurturing”) method of sericulture. He dismantled his ancestral home and rebuilt it to allow him to further his experiments for determining the optimal temperature, humidity, and ventilation conditions for silkworm development. This became the Takayama-sha Sericulture School.

The central school building is a prime example of the structural features developed for the *seion-iku* method. Silkworms were raised on the upper floor and fed mulberry leaves until they were ready to spin their cocoons. Natural convection pulled warm air from charcoal braziers on the ground floor into the upper floors through vents between the floors, and roof vents were opened or closed to regulate the air flow. The trays on which the silkworms were fed were placed in racks that allowed air to circulate, helping to create the ideal environment.

Chogoro also invited young men from outside the village to board at the school while learning *seion-iku*. They came not only from across Japan but even from China and the Korean Peninsula.

In 1887, the school was moved to Fujioka and expanded to form a campus of several buildings. Takayama-sha became one of its branch schools.

The foundations of several of the campus buildings are preserved, including the laboratory and mulberry leaf storage facility. While only the foundations of the student dormitory building remain today, the student cookhouse-cum-bathhouse still stands.

Textbooks on the *seion-iku* method of raising silkworms were published in 1878, 1890, and 1895 and used at the school for training and the dissemination of its methods.

The contributions made by Takayama-sha Sericulture School were instrumental in enabling Japan to become the world’s leading producer of silk by the beginning of the twentieth century. As more advanced equipment and modern technology were introduced, however, the methods taught at the school were superseded, and it was closed in 1927.