Basic Research on Charcoal Particles at Wildfire Sites (I):
Observation Results

OGURA Jun-ichi

In this study, as part of a basic research project on Charcoal Particles, I visited the sites of four relatively large wildfires that had occurred in Japan in April and May 2014, observed the condition of these areas not long after the fires, and collected samples of Charcoal Particles from the ground surface. This paper presents the main observations made at each location. It seems that many important clues to the past vegetation exist among the items that can be observed at wildfire sites. The following are among the observations made in the present study that seem especially noteworthy:

• The quantities of airborne Charcoal Particles that are dispersed even short distances from a fire site are too small to be visible to the naked eye.
• At sites where vegetation of a grassland type has burned, Charcoal Fragments often remain in large quantities on the ground surface.
• In a wildfire, the Charcoal Particles on the ground surface are greatly influenced by the leaf litter and other organic matter near the surface at that site.
• In a wildfire, live trees remain upright and only their bark is charred.
• Different types of tree burn in very different ways.

I intend to observe more examples, however, as these observations may not apply to all wildfire sites. I will also pursue the investigation in more depth by analyzing the many samples of Charcoal Particles collected at the four sites surveyed in this study.