

Tree of the Season, Fall 2013: **Dead man's fingers (*Decaisnea insignis*)**

The gruesome common name for this tree is based on its fruits - gnarled, sausage-like pods with warty, rubbery blue skin that hang in clumps from the branches in autumn. Split one open and inside you will find large black seeds encased in an edible gelatinous pulp, which tastes mildly sweet but is somewhat slimy. Most people think these fruits are more fun to look at than to eat, but the Lepcha people of Sikkim, where the tree grows wild, are quite happy to slurp the fruit straight from the pod.

Botanists used to recognize two species of *Decaisnea*: *D. insignis* in the Himalayas with yellow-green pods, and *D. fargesii* in Western China with bright blue pods. Genetically they are nearly identical - the only real difference being the colour of their fruit, which botanists have now decided isn't enough to consider them as separate species. In keeping with taxonomic law, the two populations have been lumped together under the elder of the two names, *D. insignis*. Not everybody agrees with the name change, however, and many gardens and nurseries still label their plants as *Decaisnea fargesii*.

Seeds of the blue-fruited form of *Decaisnea insignis* (formerly known as *D. fargesii*) were first collected by Père Paul Farges, a French missionary who lived in China in the 1860s. In the Chinese province of Yunnan, Dead Man's Fingers (Chinese name Xianli), are used in traditional medicine for 'clearing heat' to balance the body's Qi, remove toxins and relieve coughing. The blue fruit are also used to make wine.

Like milkweed, spurge and rubber trees, the blue skin of *Decaisnea* pods is full of latex that protects the fruit from hungry insects. The latex is made during ripening, when special ducts form beneath the skin to help the latex flow. To make the ducts, certain cells will die and dissolve to leave hollow channels. This is an example of Programmed Cell Death, a process of great interest to cancer researchers, who would love to be able to switch on a gene that orders tumor cells to stop growing and die.

As you can see, there is much more to this wonderful tree than its creepy blue fingers.