



Philodendron billietiae Croat

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INTRODUCTION

It was in 1990 in Kaw Mountain (the road was only a trail then) that I saw a great *Philodendron* with bright yellow petioles growing on a fallen tree in plain sunlight on the side of the track. Upon my return I collected the beautiful plant, not an easy task because the strong roots were anchored under the bark of a dead tree. The big plant filled half of my old Renault Trafic van.

At home I planted it at the base of a tree on the edge of our forest. I hoped it would settle and grow, slowly upwards on the tree trunk ... and it did! Now, more than 30 years later, the big *Philodendron* has grown to about 9 meters (30') high, prospering with 2 stems, each with 9 to 13 big solid leaves. In 1993 Dr. Thomas Croat of the Missouri Botanical Gardens visited our lodge and identified the name: *Philodendron billietiae*.

With Dr. Croat, we went traveled different forest roads. On the road to Regina, we found more of these gorgeous plants with bright yellow to orange petioles. Some years later I had the honor of going into the field with Dr. Frieda Billiet from the Royal Botanic Gardens in Brussels, Belgium, and her husband. Frieda collected the first *Philodendron billietiae* for science. Dr. Thomas Croat published the description in 1995.

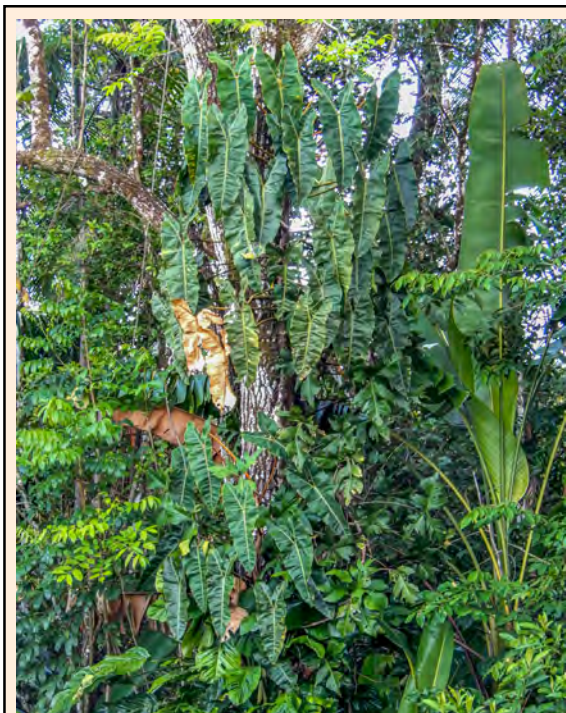


Figure 1: My first collected *Philodendron billietiae* from the Kaw Mountain is still doing well on the edge of the forest behind our lodge. The plant is over 30 years old. It was already an adult when I collected it.

DESCRIPTION

Over the years I saw many plants of *Philodendron billietiae* and found that they are quite variable in color as well as in the shape of the leaves. Plants that grow under ideal circumstances with good food, plenty of light and constant humidity from rain and a nearby creek, develop big solid leaves to about 77 cm. (20' 7") long and 30 cm. (1') wide. The leaves are dark green with light green veins. It has a yellow-golden thread around the edges of the leaf. The back of the leaf is medium to light green.



Figure 2: *Philodendron billietiae* growing between *Cyclanthaceae* on granite on an inselberg



Figure 3: Detail of the plant, note the yellow petioles typical for this species

The petioles are oval in diameter and about the same length as the leaves. The petiole color is bright yellow to almost orange and darker with large brown spots in older leaves. The stem has compact internodes, is grey to dark grey in color. The inflorescence has a greenish spathe with a bright white edge, and a mat white interior. The spadix is, as in many *Philodendron*, mat cream white. I have never seen the fruit of *Philodendron billietiae* ... but fruit and seeds do develop since we occasionally find seedlings (Figure 5).



Figure 4: The author showing a big plant on a rock in August this year. (photo Pierre-Olivier Albano)



Figure 5: An open inflorescence of *Philodendron billietiae*

A very interesting variant is found in a little area in eastern French Guiana. It grows in very humid places with lots of dead wood. I call this the "spiritus-sancti" variant, since the adult leaves are very long and slim, like the famous, true *Philodendron spiritus-sancti* from Brazil. This slim *billietiae*, however, grows easier and faster than the much-wanted *Philodendron spiritus-sancti*. Aside from the long slim leaves the coloration of this *P. billietiae* variety is different: the back of the slim leaf is purple (Figures 7, 8 & 9). So it looks really different when compared with the normal, robust form of *Philodendron billietiae*.

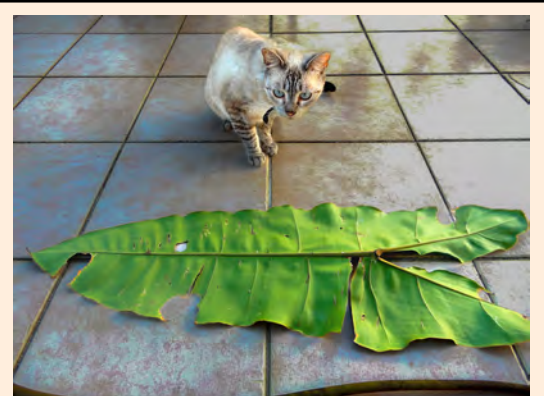


Figure 6: Kitty inspects an adult leaf of *Philodendron billietiae*. The length is about 75 cm / 2,5 feet.



Figure 7: The 'spiritus-sancti' variety with very slim leaves is found only in a very small area.



Figure 8: Detail of the leaf of the slim variety.

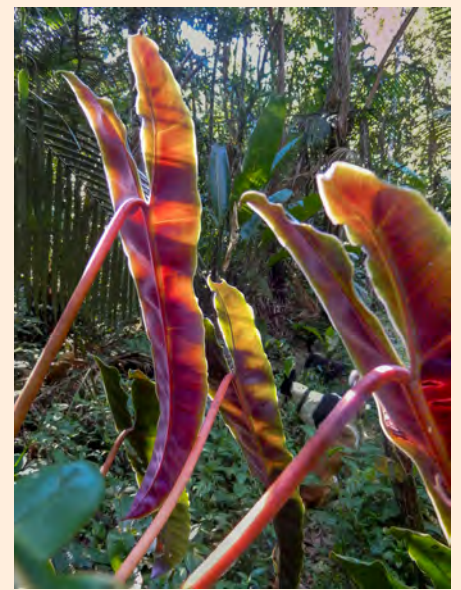


Figure 9: The purple back of the leaves of the "spiritus-sancti" variety.

HABITATS

Philodendron billietiae in the wild grows in forested areas and likes sun light. It grows on trunks of trees. When the tree falls, an open light spot is created, and *Philodendron billietiae* grows on the forest bottom, feeding on dead wood and humus.

A very different habitat is earth walls on the side of the road in mountainous areas. Here the seedlings and young plants of *Philodendron billietiae* can be found growing on almost vertical laterite walls in the full sun. And they look beautiful!

A third habitat of *Philodendron billietiae* are open spots near roads where the water is blocked by the road. Here this philo can be seen on trunks of downed dead trees, again in plain sunlight.



Figure 10: Plants of *Philodendron billietiae* on an inselberg, together with the bromeliad *Aechmea aquilega*, the purple variety. The plants are exposed to full sun and high temperatures.



Figure 11: In a small tree on an inselberg

The last habitat is on the hot granite of inselbergs. Here *Philodendron billietiae* grows under extreme heat, in full sun, often mingles with bromeliads of the genus *Aechmea*. The combination in nature of philodendrons with aechmeas and granite Orchids (genus *Cyrtopodium*) results in some very nice compositions.



Figure 12: Mingles with rock orchids *Encyclia granitica*

DISTRIBUTION

This species is for the time being only found in the northeastern part of French Guiana and in the neighboring State of Amapa, Brazil.

The furthest west where I found *Philodendron billietiae* growing was along the road RN2 past Kourou. Those plants had big solid leaves. The slim 'spiritus-sancti' variety occurs much further east towards Amapa.

HYBRIDS

At some inselbergs we see hybrids between *Philodendron billietiae* × *P. bipennifolium*. These attractive plants are called *Philodendron* × *reginae*. The leaf form and the yellow petioles identify the parents.

In the Montsinery area we sometimes see Philo's with elongated leaves and yellow stems. These are possible hybrids between *Philodendron acutatum* × *Philodendron billietiae*.

CULTURE

In the tropics *Philodendron billietiae* grows easily and the leaves are well resistant against insect damage. Give them a thick dead branch to grow on with plenty of water and light, and they develop into beautiful plants.

Our oldest *Philodendron billietiae* is more than 30 years old, big, and healthy (Figure 1).

In south Florida the species can grow outside in protected areas. They might lose their nice leaves during the winter, but the stems sleep, and will develop leaves in spring. At least that has been the experience of my Miami friends.

THANKS

Thanks to Dr. Thomas Croat for identifying this species in 1993 and to Dr. Frieda Billiet and her husband to visit with me several places where *Philodendron billietiae* could be found.

Thanks to Mrs. Katuscia Pinhero of Macapa brought to my attention the occurrence of *Philodendron billietiae* in the Brazilian State of Amapa. Obrigado!

Thanks to Mrs. Gabrielly Guabiraba Ribeiro who helped me find more details about the distribution of *Philodendron billietiae* in Amapa.



Figure 13: *Philodendron billietiae* growing on the laterite site of the highway to Brazil

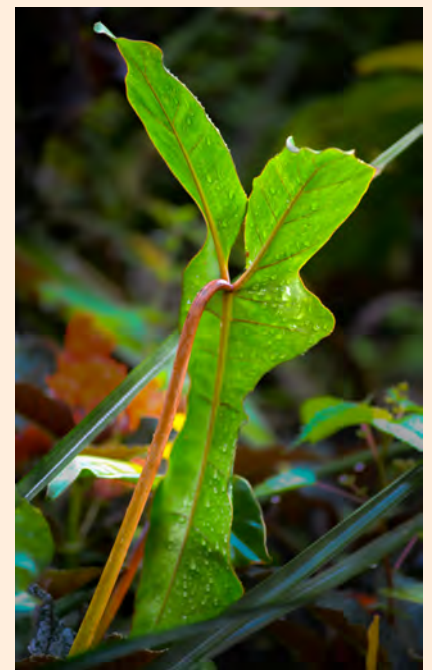


Figure 14: *Philodendron* × *reginae*