Operculicarya (O.) species have been praised by growers, collectors, and exhibitors for decades. It seems that almost all of the species are considered great subjects for staging and are highly desirable because of their care-free nature. The incredible diversity amongst them ranges from tree form to true caudiciform, each with its own set of unique characteristics making this small genus of Anacardiaceae unquestionably a gem in any greenhouse or garden.

Perhaps by presenting a short history and description of these species, including actual photos and herbarium material, prior to discussing the hybridization and heterosis traits of this genus, would provide a fundamental understanding of the genus and the vocabulary used to analyze the hybrid vigor of the new species. I must say that the new information on some of the latest described species is inadequate to truly understand or to be able to draw an accurate morphological picture of these species. Furthermore, it appears that the data of some of the recent descriptions are not tested and claims are based on partial information. Nevertheless, what is available now is more than what we had previously; this should open the door for dialogue and ultimately result in more accurate information.

Eight of the nine described Operculicarya species are endemic to Madagascar, but O. gummifera grows in two of the Comoro islands as well. Perrier de la Bathie initially described Operculicarya decaryi, O. hyphaenoides, and wrongly, O. monstruosa in 1946. He named the new genus due to the presence of opercula in the bony endocarp. Gradually, additional species were discovered and added to the genus making up the nine species that are described below.

Almost all Operculicarya species are on either the permanent or the temporary list of endangered species and are therefore protected. For that reason alone, cultivating Operculicarya became a personal goal and over the past decade I have been patiently collecting one plant at a time hoping to acquire both sexes of each species. Due to the dioecious nature of the genus, finding a flowering male and female to propagate has been difficult to say the least. As the plants began to flower outside of their species, random cross pollinating became the only alternative. This resulted in a mixed bag of the interesting and the indifferent, and a few wonders worth noting. I quickly discovered that hybridizing Operculicarya was as easy as propagating them. Since almost all the species are promiscuous and their pollen is airborne, cross pollination can take place simply through adjacency. To make deliberate attempts to create new hybrids with parental identity, the pair must be isolated in order to prevent exposure to potential pollen from other flowering male plants.

Joe Stead and I have, independently, crossed a number of Operculicarya species in the past several years and some of Joe’s hybrids have been offered in the market. This has opened the door to increasing variety and has added diversity to the genus. However, since no one, to my knowledge, has moved the process to the F2 and F3 stages, the F1 hybrids remain morphologically compromised in hybrid vigor and lack specificity.

In 2007 I was lucky enough to acquire a large female Operculicarya hyphaenoides through a trade with Jerry Wright. With consideration to the profound variation in the leaves, wood density, and vigor to the other species in the genus, there was reason enough to believe that experimental crossing of O.