Dr Michael McIllmurray THE MAXILLARIA CHAMPION

The Surrey research scientist has dedicated 24 years to promoting, exhibiting and conserving his Collection and set up a reference bank for future botanists



From left: Roy Lancaster, the plantsman; Dr Jamie Compton, the botanist and plant explorer; Dr McIllmurray; and Bala Kompalli, an orchid specialist at RBG Kew. The plant named after Michael is on the right of the picture

For 15 years Dr McIllmurray held the National Plant Collection[®] of Maxillaria in Surrey. Illness has meant that his scientific and reference Collection, journals, herbarium specimens and samples have recently been transferred to Royal Botanic Gardens, Kew, where the conservation and scientific research is continuing.

IN THE BEGINNING

The research bacteriologist dedicated his life to orchids after his retirement in 1993. He focused on *Maxillaria* that are native to Central and South America and are found mainly in rainforests. By 2002 he was awarded National Collection Holder status. "At the time, this genus of more than 1,000 species was not widely popular among orchid growers," he says. "It clearly needed a champion to promote it, exhibit it and, most importantly, conserve plants and set up a reference bank for future botanists." The collection, which originally lived on the windowsills of Michael's home until, for the sake of sanity it had to move to a small greenhouse, comprised 140 species. By 2007 that figure had more than doubled. "When the seams would stretch no farther, we had to move house," he explains.

Michael designed and established a purposebuilt greenhouse with two temperature zones and conducted experiments to find the best cultural conditions for his *Maxillaria*. He was determined to match the plants' natural environmental conditions – "gentle air movement was provided by ceiling fans, and bench-top oscillators replicated the breeze that flows through the rainforest", Michael says. "We even used a rainwater-fed cloud generator in the warm house to roll clouds gently through





Dr McIllmurray and his wife Carol and daughter Anne

the plants twice a day and the whole floor was wet down with tap water as much as possible."

Michael has regularly exhibited his *Maxillaria* at RHS and other shows and he was awarded a Gold medal for the best display in the Plant Heritage Marquee at the RHS Hampton Court Palace Flower Show in 2010. One of his plants was awarded first prize ribbon in 2015 at the Malvern International Orchid Show and he has also received a Certificate of Cultural Commendation from the RHS Orchid Committee.

SCIENTIFIC STATUS

Michael's background as a bacteriologist stood him in good stead for securing Scientific Status for his Collection in 2014. His meticulous drawings and photographs of flowers and flowering parts are backed by detailed measurements and descriptions. In most cases he also made an herbarium specimen of the flower and a spirit sample preserved in alcohol and glycerol.

His quest for knowledge and specimens brought him a wide range of contacts from the *Maxillaria* heartlands of Peru, Ecuador, Colombia and Costa Rica to experts in the field in the US, France, Holland and Sweden. To have started as an amateur plantsman and now to have his Collection happily housed at Kew is a triumph.

It was Michael's friendship with Dr Henry Oakeley, one of the world's leading orchidologists and a previous National Collection Holder, that led him to Dr Phillip Cribb, who was Kew's Orchid Curator. "Dr Cribb gave me access to the library so I could



Maxillaria 'Checkmate'

read the published work on *Maxillaria* and to the herbarium, where I could study extensive files of many of the older species. Dr André Schuiteman, who took over from Dr Cribb, has been equally generous and supportive."

MICHAEL'S LEGACY

The naming and identification of specimens has been at the heart of Michael's research. So too has the drive to conserve plants whose habitat is under constant threat. He has published eight papers either jointly or as the sole author and material from his Collection has given rise to nine other scientific publications. "I have barely been able to scratch the surface of what needs to be done," he says, "but I am happy with what has been achieved in the knowledge that my friends at Kew will be the future 'champions' for this fascinating genus."

In 2008 Michael was honoured to have a hybrid named after him by Pascal Sauvêtre - *Maxillaria* 'Michael McIllmurray' (*M. striata* x *M. luteograndiflora*). "It has a relatively large flower, bright yellow with bright red striations along the tepals, and the most beautiful perfume that I wish I could bottle. Such a legacy!"

Michael's dedication and strong desire to contribute to scientific knowledge is a testimony to the important role that Collection Holders play in preserving plant diversity. "The National Plant Collection has given me a reason for living and as the natural world is becoming so devastated by the hand of man, it will leave a vitally important legacy," he says. "As each species becomes extinct in the wild it can never come back again. Please don't let this happen." *****