

## THE ORCHIDS OF PROTEA HILL FARM

Observations over 30 years

### Part 4 – The woodland species

During a period of 40 years without fire, areas of wooded grassland were transformed into closed canopy woodland. The canopy trees are woodland species, but the ground cover varies from leaf litter, to forest flora, flimsy annual grasses (*Setaria homonyma* and *Oplimemus burmannii*) or Acanthaceous subshrubs (*Asystasia gangetica*, *Justicia betonica*). In natural circumstances this combination is only found in rocky terrain and at dambo margins, where a discontinuous grass cover excludes fire.

Orchids of this habitat:

*Liparis nervosa*  
*Disperis anthoceros*  
*Disperis katangensis*  
*Eulophia fridericii*  
*Eulophia guineensis*  
*Habenaria malacophylla*  
*Habenaria subarmata*  
*Nervilia adolphii*

***Liparis nervosa*** (Thunb.) Lindl.



**Figure 1** – *Liparis nervosa*, rooted in leaf litter in woodland.

A remarkably adaptable species found in habitats ranging from swamp grassland to dry woodland. At Protea Hill it has appeared in shady woodland and in fissures in quartz rocks.

***Disperis anthoceros*** Rchb. f.



**Figure 2** – *Disperis anthoceros*, 9 February 2014

This common little orchid was first found in shady woodland on 8 Feb 1996, and has appeared in the same general area every year since. From a core area the population expands and contracts.

***Disperis katangensis*** Summerh. var. *katangensis*

This little orchid is common throughout northwestern Zambia, less so in the southern part of the country. It characteristically occurs in small groups, probably clones propagated by multiple tubers.

**Figures 3 & 4** – *Disperis katangensis*, 18 January 2014. This tight group of plants was first recorded in January 2013 in a small clump of trees.



***Nervilia crociformis*** (Zoll. & Moritz) Seidenf.



**Figure 5** – *Nervilia crociformis* – A clone grown from a plant collected from Lilayi. 6.iii.2011

A small clone, probably of this species, survived for many years in *Hyparrhenia filipendula* grassland. In recent year the *H. filipendula* has been largely replaced by the more robust and aggressive *H. cymbaria*. I have not been able to find the orchid again.

In *Nervilia* spp. flowering and fruiting are over before the leaves appear.

***Habenaria subarmata*** Rchb. f.



**Figure 6** – 29 January 2012

This plant appeared spontaneously in a different patch of woodland from the one where I had planted a specimen collected from the wild. It flowered again in the subsequent two seasons.



**Habenaria malacophylla** Rchb. f.

The clone in Figure 6 grew from a plant introduced from the wild before 1990. The first record of a self-seeded plant was a flowering specimen, on 14 January 1987. Since then colonies have appeared in three different sites in woodland.



**Figure 6** – *Habenaria malacophylla* clone



**Figure 8** – 6 March 2011



**Figure 7** – Flowering and sterile plants, 6 March 2014