SHORT COMMUNICATION

The transfer of *Harveya alba* to *Alectra* (*Scrophulariaceae*)

A few years ago F.N. Hepper (*Kew Bull.* 47: 729, 1992) described a curious little white chlorophyll-less plant of the forest floor from three separate localities in eastern central Africa: from Rwanda, from the Toro district of Uganda and from N Kavirondo distr. of Kenya. This plant was named *Harveya alba*, with the comment that it was unusual in the genus in having a linear stigma with stigmatic surfaces along the sides, one of the unequal anther thecae with only a very short point and smaller flowers than any of the E African species. All that is perfectly true, but its taxonomic significance is not to indicate a new species of *Harveya*; it is to indicate a very distinctive species of the related genus *Alectra*. The form of stigma alone is enough to justify the transfer to *Alectra*, where the linear stigma is a standard feature; it is quite unknown in *Harveya*. The small flowers also accord well with *Alectra*, both in shape and size.

Flower colour in *Alectra* is usually some shade of yellow, with or without reddish veins. I have found only one record of white flowers in *Alectra*; this was for a specimen of *A. parasitica* A. Rich. collected by Mrs S. Collenette in Oman (Fort Nashib road, 1000ft, *Collenette* 8384 (E)). Only one specimen was found and it was annotated 'fls. white!', indicating the collector's recognition that this was unusual in *Alectra*. The normal yellow-flowered *A. parasitica* had been collected on the previous day near Umbaraaf, 2100ft (*Collenette* 8371 (E)). Both collections were noted as probably parasitic on *Hypoestes*. It seems likely, therefore, that the white-flowered plant was just a sport of the normally yellow-flowered species. The white flowers of *Alectra alba*, as we may now call it, are constant in its three widely separated localities.

Alectra was last revised by Melchior (*Notizbl. Bot. Gart. Mus. Berlin-Dahlem* 15: 423–447, 1941), who had previously (op. cit. 15: 119–127, 1940) clarified the difference between *Alectra* and *Melasma*, two genera that had previously been confused. Melchior divided *Alectra* into two sections: sect. *Alectra* (sect. *Eualectra* Melchior) which contains the species with well-developed green leaves, and sect. *Orobanchoides*, the species of which are more nearly total parasites, with reduced leaves and drying black. *Alectra alba* certainly fulfils the key requirements to be placed in sect. *Orobanchoides*, but there is a difficulty. Greenway and Eggeling recorded their specimen (cited by Hepper) as a saprophyte, and the opinion of two such experienced botanists is not to be lightly set aside. There are two other items that suggest caution in accepting *A. alba* as a holoparasite: first it has a slender, tapering, branched root-system, quite unlike the thick, often slightly swollen, base to the stem from which rather thick lateral roots arise in other members of sect. *Orobanchoides*; secondly, *A. alba* was said to be parasitic on roots of forest trees, a way of life not yet recorded for any other species of *Alectra*. Thus, if *A. alba* should prove to be a saprophyte it

would provide an interesting extension of the characters of the genus. Indeed, I am not aware of any other saprophytes in *Scrophulariaceae*, whereas hemiparasites and holoparasites are well known. The development of a saprophytic habit in a forest-floor species of *Alectra* would parallel the same change that is known to have taken place within *Sebaea* (*Gentianaceae*) as described by Dr Raynal-Roques for *S. oligantha* (Gilg) Schinz (see *Adansonia* sér. 2, 7: 207–215, 1967). In a more recent paper (A. Raynal-Roques & J. Paré in *Adansonia* sér. 3, 20: 313–322, 1999) attention is drawn to the phenomenon of indirect parasitism between two phanerogams that are linked by a mycorrhizal fungus. This is known to occur in *Monotropa* and also in *Voyria* (*Gentianaceae* – see Imhof & Weber in *Acta Botanica* 110: 127–134, 1997). It is to be hoped that the next person to find *Alectra alba* will make very careful examination in the field to see if its roots make any attachment to those of another plant or fungus.

The formal transfer (to which Dr Hepper agrees) is:

Alectra alba (Hepper) B.L. Burtt, **comb. nov.**
Syn.: *Harveya alba* Hepper in *Kew Bull.* 47: 729 (1992); E. Fischer, Natur und Umwelt Ruandas, 77, 78, fig. 59 (col.) (1992).

The specimens recorded by Hepper are repeated here; I have seen no others.

RWANDA. Forêt de Cyamudongo, near R. Nyamabuye, 28 viii 1990, *Fischer* 575 (holo. K! BR, MJG).
UGANDA. Toro distr., Itwara Forest, Fort Portal, 29 i 1945, *Greenway & Eggeling* 7054 (EA, K!).
KENYA. N. Kavirondo distr., Kakamega forest, 23 ii 1978, *C. van Someren* EA16258 (EA n.v.).

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