

**Freesia refracta*
**Gladiolus undulatus*
**Ixia maculata*
Libertia ixioides

**S. tricolor*
**Watsonia bulbifera*
**W. meriana*

JUNCAGINACEAE
Triglochin striata SM

LILIACEAE
**Agapanthus orientalis*
**Allium roseum* subsp. *bulbiferum*
**A. triquetum*
**Asparagus asparagoides* - AK 206841
**A. scandens*
**A. setaceus*
Astelia banksii CC

A. solandri
A. trinervia
Collospermum hastatum
Dianella nigra
**Lilium formosanum*
**Ornithogalum arabicum*

PANDANACEAE
Freycinetia banksii

SMILACEAE
Ripogonum scandens

TYPHACEAE
Typha orientalis BM

ZINGIBERACEAE
**Hedychium flavescens*

**H. gardnerianum*

ZOSTERACEAE
Zostera ?muelleri CM

Reference

Hatch, E. D. 1981. Persistent Garden Plants As Homestead Markers. *Auckland Botanical Society Newsletter* 36: 13.

Southern rata (*Metrosideros umbellata*) confirmed from Mt Pirongia, Western Waikato

P. J. de Lange

The 1877 and 1879 ascents of Mt Pirongia (altitude 959 m) by Thomas Cheeseman comprise the first published botanical record of that mountain's flora (Cheeseman 1879). Amongst the c. 93 species he recorded, Cheeseman noted that southern rata (*sic. Metrosideros lucida*) was 'plentiful' below the summit. From his account it seems clear that this 'summit' was either Wharauoa or Mahaukura, peaks overlooking the small town of Pirongia - the Alexandra of Cheeseman's day. Cheeseman it seems never attained the true summit noting "that after spending the greater part of a day in advancing a distance certainly not exceeding a mile, the attempt was abandoned". Remarkably few specimens were collected by Cheeseman during his visits to the mountain. Of the collections he made, I can find little trace, and there is no voucher of southern rata from Pirongia in his herbarium at AK.

Following on from Cheeseman some 76 years later Gudex (1955) provided a more detailed account of the flora. Like Cheeseman before him Gudex also recorded southern rata. When his herbarium

was donated to the Waikato University in December 1983 I was one of several people who searched keenly through it for vouchers of some of his more obscure records, including one for his Mt Pirongia record of southern rata. No supporting vouchers were found but of those other Waikato *Metrosideros* collections he had made, many were labelled as *sic. M. lucida (M. umbellata)*. All of these proved to be *M. robusta* (WAIK!). So it seemed not unreasonable to assume that Gudex's Pirongia record was the result of a similar misidentification. Furthermore as Gudex was crippled by polio, he was unable to explore much beyond the first rock peak on the more accessible side of the mountain - Ruapane (Gudex 1955). Therefore the majority of the montane species he recorded were the result of specimens collected by those capable of climbing higher, from verbal accounts, or it would seem, from duplication of Cheeseman (1879). Either could have been the source of the record, although I surmised that the southern rata record was most probably the result of a misidentification by either Gudex or a member of his party. One nagging doubt remained, while it seemed likely that Gudex's record was in error, what of Cheeseman's? Cheeseman rarely made mistakes with his identifications and certainly not of such a distinctive plant as this.

My explorations on Pirongia started in 1978, the same year that Tony Druce first visited the mountain, ultimately to prepare one of his now famous species lists, that form such a valuable guide to the field botanists throughout New Zealand. Tony failed to confirm the Cheeseman and Gudex records of southern rata but seeing no reason for it not to be there, retained the species in his checklist (Druce unpub. Checklist 179, 1978).

Since my first struggles across Pirongia in 1978 I made regular excursions to the mountain. I became increasingly interested in tracking down many of the more obscure plant records made by Cheeseman, Gudex or by my old mentor Reg Bell. Yet despite the many additions I made to Druce's list, southern rata always eluded me, even when I camped near the summit for three weeks, systematically exploring the many plunging cliffs and rocky spurs that comprise the summit peaks of the mountain range. After that trip I came to seriously doubt that southern rata ever occurred on the mountain. This remained my view until April 1990, when while exploring a ridge top near Mahaukura, my persistence was rewarded with the discovery of a single unhealthy sapling of southern rata (Fig. 1). The location not only surprised me - I had walked passed it so often - but it corresponded exactly to the approximate area where Cheeseman had seen it almost 111 years before! The specimen although close to the track is easily missed because it grows through dense tawheowheo (*Quintinia serrata*) and kamahi (*Weinmannia racemosa*). Despite intensive searching no other plants were found, although it is quite likely that more occur on the precipitous cliffs of the main summit ridge.

While I can now happily confirm Cheeseman's record (Fig. 1), it would seem that southern rata is close to extinction on the mountain. Following Cheeseman's visit it appears to have suffered a major decline, possibly through the depredation's of the numerous goats and possums that plagued the mountain virtually unchecked for much of the 1940s - mid 1980s. It has also been suggested (E. K. Cameron *pers. comm.*, 1994) that storm damage may have contributed to its decline on the mountain. This is quite possible, as much of the summit ridge is unstable. Following severe storms such as Cyclone Bola, I have witnessed numerous large slips and fallen trees all along the higher ridges and peaks of the mountain. Episodic events such as these could have easily reduced the extent of southern rata on Pirongia over the last 111 years.

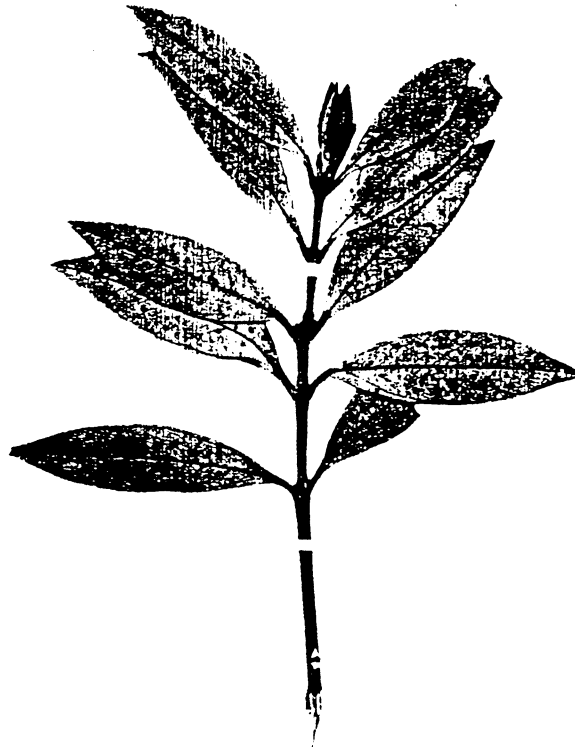
Acknowledgments

I would like to thank Ewen Cameron and Rhys Gardner for their comments on the text. Ewen kindly confirmed my original identification of AK as *Metrosideros umbellata*.

References

- Cheeseman, T. F. 1879: On the botany of the Pirongia mountain. *Transactions and Proceedings of the New Zealand Institute* 12: 317-323
- Druce, A. P. 1978: Indigenous vascular plants of Pirongia mountain (14th Revision). Unpublished Checklist, DSIR Land Resources, Soil Research Bureau, Taita, Lower Hutt, Wellington
- Gudex, M. C. 1955: The native bush flora of Pirongia mountain. *Transactions of the Royal Society of New Zealand* 83: 303-311

Figure 1: Voucher specimen of southern rata from Mt Pirongia



AK 199759

AUCKLAND INSTITUTE & MUSEUM HERBARIUM
AUCKLAND, NEW ZEALAND

MYRTACEAE

Metrosideros umbellata Cav.

Loc. New Zealand, North Island, Waikato Ecological
Region, Waipa Ecological District, Mount Pirongia,
Mahaukura Track, near summit ridge
Map S15 948544 Alt. 820 m
Lat. 38 00 S Long. 175 16 E
Coll. P J de Lange 322 Date 25 April 1990
Det. P J de Lange Date 25 April 1990
Notes A single straggly juvenile specimen growing through
Quintinia on cliff face. Confirms Cheeseman (1880)
record