Length of fore foot and claws	... ...	$\frac{5}{8}$ inches.
„ of hind foot and claws	... ...	$1\frac{1}{2}$ „
„ of skull...	... ...	$1\frac{5}{8}$ „
Width of skull	... ...	$1\frac{1}{16}$ „
Length of nasal bones...	... ...	$\frac{5}{8}$ „
„ of palatine bones	... ...	$\frac{3}{4}$ „
„ of lower jaw	... ...	$1\frac{5}{16}$ „

Habitat.—Streams of Northern Tasmania.

Extremely abundant on the banks of the river Tamar, and probably widely distributed over the island. Settlers residing near the river suffer much from its destructive propensities. Specimens of a very much larger size than the type are occasionally seen.

Mus Leucopus.

Since the description of "leucopus" was written we have received from Storey's Creek and Long's Plains, and the Royal Society's Museum at Hobart, from the West Coast, specimens of a rat, agreeing in all its essential characters with the type, but differing from it in its much greater size and darker fur. We do not at present feel justified in describing it as a separate species. The type specimen, an adult male, from Kentishbury, measured

From tip of nose to root of tail	... ...	$3\frac{3}{4}$ inches
Length of tail	... ...	$3\frac{3}{4}$ „

The specimens from Storey's Creek, Long's Plains, and the West Coast measure

From tip of nose to root of tail	... ...	$5\frac{1}{8}$ inches
Length of tail	... ...	$6\frac{1}{4}$ „

NOTES ON NEW PLANTS INTRODUCED INTO THE ROYAL SOCIETY'S GARDENS DURING 1883,

By Francis Abbott, Superintendent.

The following notes on plants, received at the Gardens during the year, have been made with a view to giving increased publicity to this portion of the Society's operations; and also to bring prominently forward any plants of particular merit, either of a useful or ornamental character.

On reviewing the list of introduced plants, I find that there are not many that are likely to become of much utility, yet there are a few which are deserving of notice in this respect, as they are of great commercial importance in their native country.

I would first call attention to the South American Pinus

Australis, which in its native habitat is known as the Georgia Pitch Pine. This tree covers large tracts of country, which are called Pine barrens; it furnishes a superior wood of a very durable nature, suitable for all constructive purposes. Its timber is largely exported, and is known in the trade as the Yellow Pine, or Deal. It also yields, by tapping, large quantities of turpentine, pitch, resin, and tar, large shipments of which are sent to Europe and elsewhere.

The tree is said to be of slow growth during its early stages; this, probably, will account for the slow progress of the seedlings raised at the Gardens, which are not as yet more than a few inches high.

Several species and varieties of American Grapes have been raised from seed; these may eventually prove of some cultural importance in the colony. The first of these I shall refer to is Vitis Labrusea, popularly known as the Northern Fox Grape. The varieties of this grape are largely cultivated in the United States both for wine and table use, but more especially for the latter. This is a hardy grape, frequenting moist ground. It is the largest berried of the American Grapes, and has consequently had more attention devoted to it than the other indigenous species. This has resulted in the production of numerous varieties, many of which are held in high estimation. The Catawba is considered to be the best flavoured of these varieties, but it is very subject to mildew. Ive's is also good, but for general cultivation Concord is considered the best, though somewhat deficient in flavour.

The varieties of Vitis Æstivalis (the Summer Grape) are superior as wine grapes to any other of American origin. Wine made from this grape is held in high estimation on the continent of Europe. The berries are sweet and almost destitute of pulp. The plant requires a warm climate to grow it successfully. The fruit ripens late, but when thoroughly ripe it produces some of the best wine in the country. The plant is very little subject to mildew, which is a consideration of some moment.

Vitis Cordifolia (the Frost Grape) is a small berried sour grape which does not reach perfection till late in the season, or not until frost has set in. It keeps well after gathering, but is generally considered too sour for the production of a good wine. The plant enjoys an immunity from mildew and disease generally, and on this account is valuable for the purpose of hybridising vines of a less healthy nature, as well as for purposes of propagation. The variety Clinton is at present most esteemed for cultivation.

Vitis Vulpina. This is a tender grape requiring a warm situation and rich moist soils; in such it bears abundantly.

It does not appear qualified to produce a good wine by itself, but needs the addition of sugar and alcohol, when it produces an excellent wine; the grape itself imparts a fine bouquet to the product. There are not many of the varieties of this species at present in cultivation; the Scuppernongs are considered to be about the best.

Most of the better class of American Grapes are subject to mildew on the leaves, and consequently are not much cultivated, while those of only second-rate quality, which are of a more hardy constitution, are largely grown both for market and table. Efforts have been made to secure an improved race by crossing with the best varieties of the European vine (Vitis Vinifera), but the progeny are not of a sufficient hardy constitution and quickly die out. On this account the American horticulturists have now turned their attention to the native species, and varieties are yearly being raised, many of which are said to be of superior merit.

Apart from the importance of these vines for the production of fruit or wine, they are in request on the Continent as a stock on which to graft the cultivated varieties of the European vine. The roots of the American vines are not liable to the attack of the much dreaded Phylloxera, by which the vineyards of Europe are at present being devastated. It is hoped that by working on the American vines that this evil will be considerably checked, if not eradicated.

In the ornamental section the introductions have been more numerous, and may eventually add much to the floral beauty of the island. Prominently in this section are the various Rhododendrons, which are invaluable in an ornamental point of view. When this class of plants become better known they will be sure to be more extensively cultivated in the island than they are at present, especially as there are large tracks of country of a peaty or sandy-vegetable nature, occurring naturally, which are eminently suited to their requirements, and where they could inexpensively be grown to an unlimited extent.

In the colder parts of the island the Himalayan species and hybrids would require protection during the winter months.

Of these, Rhododendron Veitchianum is a noble species from Moulmein. It produces large, white, fringed flowers, exhaling a strong perfume. The flowers may be compared to a large fringed vase.

Rhododendron Javanicum is a fine rich orange-flowered species from Java. It has been much used in the production of the many beautiful hybrid Rhododendrons brought into notice of late.

Rhododendron Ciliatum is a dwarf early flowering rose

and white species from the Himalayas, much prized for early cutting.

Rhododendron Countess of Haddington is a hybrid of great beauty, producing blush-coloured flowers. The following may also be mentioned as hybrids of merit :—Fragrantissimum, Elegantissimum, Prince Leopold, Princess Alice, Princess Helena, Princess Hortense, Princess Royal, Princess of Wales, Denisoni.

The foregoing would in England be classed as greenhouse Rhododendrons, but in this colony they will doubtless prove hardy if planted in warm situations. They are all of very great merit.

In hardy Rhododendrons many varieties have been introduced during the year. So successfully have hybridists been at work of late years that the hardy Rhododendrons have now, many of them, more or less of the Indian type imparted to them, which has much improved the quality of flowers; but in some cases this has been attained at the expense of hardihood. It is well known to the cultivators of Rhododendrons that the greater the affinity to the Himalayan type the less hardy does the variety become. Some of the best in this class of late introduction are :—

James Marshall Brooks, a grand acquisition, producing large trusses of flowers of a rich crimson colour.

Boula de Neige, a beautiful dwarf early free-flowering variety; flowers of the purest white.

Cunningham's White, an extra fine large white flowering variety.

Vesuvius, a fine bright crimson flowered variety.

Ferdinand Louvrex, producing very large trusses of carmine striped flowers.

Madame Linden, a fine masculated variety; quite new.

About a dozen varieties of the hardy Japan Azalea Mollis have been received during 1883. This plant has only recently come into general cultivation. It is superior as an ornamental plant to Azalea Frontica, and will, in time, in all probability, supplant that well known species. It is an early bloomer, and is very valuable for forcing for decorative purposes.

One of the most interesting introductions of the past year is Disa Grandiflora, a magnificent hardy terrestrial Cape Orchid, only found on the summit of the Table Mountain. This Orchid has always been held in repute by cultivators, both on account of its great beauty as well as its hardy constitution; a cool greenhouse, or common frame, being quite sufficient for its successful cultivation.

Many efforts had been made to introduce this Orchid into this colony, but every attempt resulted in failure; the tubers

were either quite dead on arrival, or there was so little vitality left in them that they soon perished. These failures having been mentioned to Mr. Tuck, a gentleman from South Africa, who happened to be on a visit to Tasmania last year, and who had brought with him some plants of Disa for Victoria, he promised on his return to the Cape to procure some tubers of the plant and forward to me. In due time I received a small tin box containing sods thickly studded with Disa tubers, which were forwarded by Professor M'Owen, Director of the Botanic Gardens, Cape Town. These tubers have grown freely, and there can now be no longer any doubt of the Disa having been successfully introduced.

The new varieties of fruit introduced during the year have not been so numerous as during previous ones. As a matter of fact the collection of fruit at the Gardens (about 600 varieties) is cramped and starved to such an extent as to defy any attempt at successful cultivation, and the addition of more varieties but complicates the evil.

It is very desirable that a standard collection of fruit should exist in the colony, if only for the purpose of securing correct nomenclature, which is in itself a matter of some importance. The maintaining of such a collection should engage the attention of a Horticultural Society, rather than that of the Royal Society, and did one exist in Tasmania it would be advisable to hand the collection over to it. In the absence of such a Society it becomes a necessity that the present collection at the Gardens be maintained for some time longer.

The mere acquisition of varieties is a matter of secondary importance to that of practically exemplifying the various modes of training and good culture in such a manner as to afford instruction to all desirous of acquiring it. This is indeed the legitimate work of a Horticultural Society, but can only be satisfactorily carried out where a sufficiency of suitable labour is available for the purpose.

As a result of the want of labour at the Gardens, this department has in the past been almost entirely neglected. In its present state it is practically useless, and must, I fear, remain so, unless the Society have placed at its disposal largely increased funds.

In the foregoing notes I have only alluded to some of the more meritorious plants; others of more or less interest might have been included in them, but sufficient has probably been said to show that the past year's introduction are not altogether devoid of merit.