

# *Platylobium obtusangulum*

*Platylobium obtusangulum* (Hook.) syn. *Platylobium macrocalyx* (Meissn.) is in the Fabaceae family, which is the pea family.



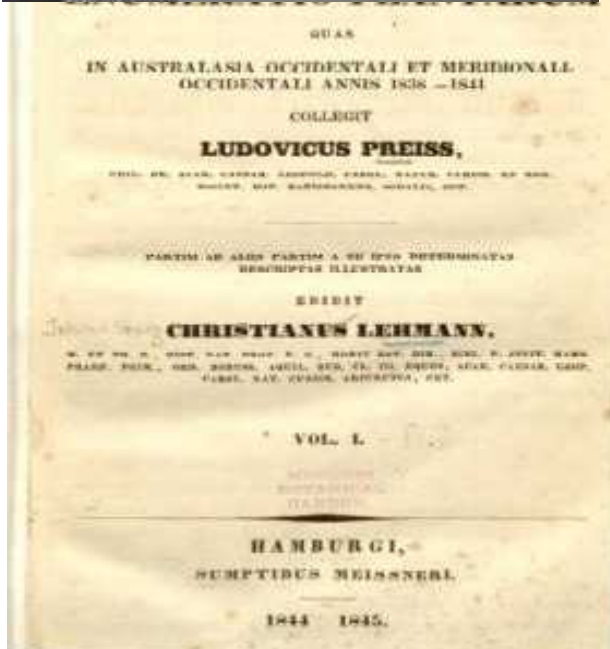
The Common Flat Pea is an erect or straggling bush that grows up to 1 metre high. It flowers in spring and inflorescences are yellow with a red centre. It is found in New South Wales, Victoria, South Australia and Tasmania.

We have been very lucky as Anna Murphy, who worked on the *Glycine latrobeana* (Purple clover) project for the Victorian Department of Sustainability and Environment, was able to search the Royal Botanic Gardens Herbarium database and found two entries of further specimens collected by La Trobe.

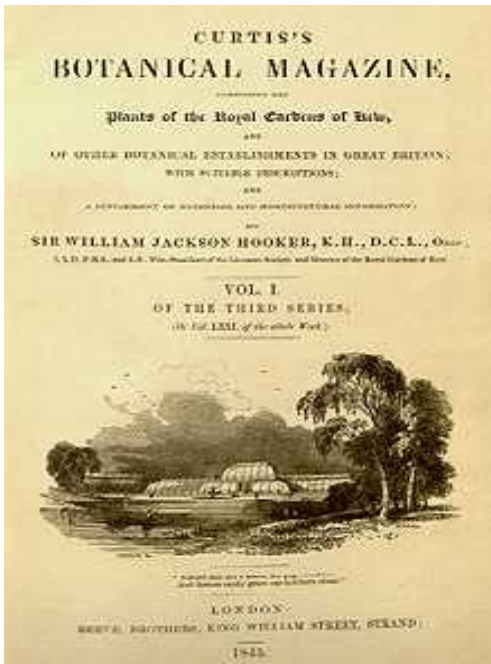
One was the *Veronica perfoliata* (Diggers speedwell) and the other is this specimen *Platylobium obtusangulum*, known commonly as Specimen of *Platylobium obtusangulum*

the Common Flat Pea, which La Trobe collected on his travels around the Port Phillip District in 1842. It is now housed at Université de Neuchâtel in Switzerland.

Labels on specimens are fascinating because they tell us so much about the history of the plant and its travels. When La Trobe collected this specimen, he sent it to the Swiss botanist Carl Meisner (1800-1874) to be described. Meisner named it *Platylobium macrocalyx* and the description was published as a new species in *Plantae Preissianae*, second volume in 1845. This was a publication started circa 1838 by Johann Georg Christian Lehmann (1792-1860), a German botanist.



The label also tells us that on page 80 to 81 of this publication *Platylobium macrocalyx* was collected from *Ad Port Philipp in Novae Hollandiae ora Australi legit cl. La Trobe*. (Australia was then still called New Holland.)



However, an earlier specimen had been collected and sent to England to be described by William Jackson Hooker in 1833. It was published in the *Botanical Magazine or Flower-Garden Displayed*. This illustrated publication was started by William Curtis (1746-1799), who began as an English apothecary and due to his interest in plants became a botanist. The magazine began in 1787 and is where many new plants were first described.

As Hooker's description was first published in 1833, the rule in taxonomy is that the earliest known date of publication of a species name takes precedence over all others. Remember that communication in the 1800s was slow: it could take many months for a letter from Australia to arrive in Europe and universities and herbariums did not communicate with each other as they do today, so collectors might not have known a species had already been described.

We also learn that the specimen visited the National Herbarium of Victoria in 1981 and that J. H. Ross determined that the specimen was a lectotype of *P. macrocalyx*.

Dr. Jason Grant helped us to decipher the text and explains that when a new species is described it is compared to the most closely related species. The label says *A P. triangulari R.Br. simillimum differt calyce duplo bracteisque quaduplo majoribus*, which translates as *Platylobium macrocalyx is similar to Platylobium triangularis from which it differs by twice as big calyces and four times as big bracts*.

Early botanists did not always designate a type, which is the original series of specimens used to describe a new species. Type is important because species grown in one area can have slight differences from the same species grown in another area, due to environmental conditions. Botanists need a base line to which they can compare and contrast specimens.

Today in botany, botanists want to know which is the "real" type. If the main specimen (Holotype) is missing, botanists select a duplicate from the original series of specimens used by the earlier author and it becomes known as a lectotype.

We are sure that La Trobe would clearly be amazed that specimens he collected over 170 years ago are still being used and contributing to the knowledge of botany.

#### **Acknowledgement:**

We would like to thank Dr. Jason Grant of Université de Neuchâtel, who located the specimen, photographed it and explained some of the terminology of botany, and Anna Murphy who found the information of where some of La Trobe's specimens are housed today.

Source of Photos of publications:

*Plantae Preissianae* [en.wikipedia.org/wiki/Curtis's\\_Botanical\\_Magazine](http://en.wikipedia.org/wiki/Curtis's_Botanical_Magazine)

*Botanical Magazine* [www.biodiversitylibrary.org/item/9227#page/4/mode/1up](http://www.biodiversitylibrary.org/item/9227#page/4/mode/1up)