Type Specimens in the Herbarium of the Taiwan Forestry Research Institute. VI.

Editors/
Jer-Haur Li,
Chien-Wen Chen,
Kuoh-Cheng Yang,
Shih-Wen Chung,
Wen-Liang Chiou



Publish by

Taiwan Forestry Research Institute

Published in July 2008

Copyright © by the 2008 Taiwan Forestry Research Institute.
All right reserved. No part of this publication may be reproduced, stored in a retrieval system of transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the copyright owner.

Type Specimens in the Herbarium of the Taiwan Forestry Research Institute. VI.

Publisher/
Yue-Hsing Huang

Editors/
Jer-Haur Li,Chien-Wen Chen, Kuoh-Cheng Yang, Shih-Wen Chung, Wen-Liang Chiou

Art Editor/
Pei-Lun Lee
Wun-De Cai

Published by/
Taiwan Forestry Research Institute
53 Nanhai Road, Taipei 100, Taiwan.
Telephone:+886 2-2303-9978
Fax:+886 2-2314-2234
WWWURL: http://www.tfri.gov.tw

Printer/
Taipei Victory Social Welfare Institution.

Purchase inquires/
Govermment Bookstore
BIF.,No.10,Sec.3,Bade Rd.,Taipei 105, Taiwan (R.O.C.)
Wu-Nan Book Co.Ltd.
No 2, Zhongshan Rd., Taichung 400, Taiwan (R.O.C.)

Price/
NT$350 (surface mail postage not included)
GPN:1009701817
ISBN:978-986-01-4823-7 (softbound)

Type Specimens in the Herbarium of the Taiwan Forestry Research Institute. VI.

Jer-Haur Li,[1,3)] Chien-Wen Chen,[1)] Kuoh-Cheng Yang,[2)]
Shih-Wen Chung,[1)] Wen-Liang Chiou,[1,4)]

Summary

A portion of the type specimens preserved in the herbarium (TAIF) of the Taiwan Forestry Research Institute was reviewed and scanned. Specimens included dicotyledons belonging to 13 families, 37 genera, 84 species, and 6 varieties. The family arrangement of the taxa follows the system of Engler and Diels. Infra-family taxa are arranged alphabetically by genera and species. An explanation for each taxon is provided in the figure caption. Discrepancies between specimen labels and original descriptions are noted when appropriate.

Key words: dicotyledon, TAIF, Taiwan, type specimen.

Li JH, Chen CW, Yang KC, Chung SW, Chiou WL. 2008. Type specimens in the herbarium of the Taiwan Forestry Research Institute. VI.

[1)] 行政院農委會林業試驗所森林生物組，台北市南海路53號
Division of Forest Biology, Taiwan Forestry Research Institute. 53 Nanhai Rd., Taipei 100, Taiwan.

[2)] 靜宜大學生態學系，台中縣沙鹿鎮中棲路200號
Department of Ecology, Providence University. 200 Chungchi Rd., Shalu, Taichung 433, Taiwan.

[3)] 現在地址：林務局花蓮林區管理處，花蓮縣花蓮市林政街1號
Current address: Hualien Forest District Office, Forestry Bureau, 1 Ling-Cheng St., Hualien 970,Taiwan.

[4)] 通訊作者 Corresponding author.

2007年11月送審 2008年2月通過 Received Nov. 2007, Accepted Feb. 2008.
Short running title: Li et al. – Type specimens of TAIF

台灣林業試驗所標本館之模式標本 VI

李哲豪[1,3]、陳建文[1]、楊國禎[2]、鐘詩文[1]、邱文良[1,4]

摘要

本文整理並掃描台灣林業試驗所標本館(TAIF)典藏之模式標本。全文包括雙子葉植物13科37屬84種及6變種。排列先依恩格勒系統的科序排列，科內之屬及種則以英文字母次序排列。各標本之描述置於圖說，標本上標籤之描述與原發表文獻有所出入之處，則註記於圖說之下。

關鍵詞：雙子葉植物，台灣林業試驗所標本館，台灣，模式標本。

李哲豪、陳建文、楊國禎、鐘詩文、邱文良。2008。台灣林業試驗所標本館之模式標本 VI



INTRODUCTION

The herbarium of the Taiwan Forestry Research Institute (TAIF), established in 1904, is the oldest herbarium in Taiwan. More than 1300 type specimens are preserved here. Most of them were cited as new species described by Hayata (e.g., 1911~1921). The status of these specimens was reviewed by Sasaki (1930), Y. Tsiang (annotation marked on the specimen sheets), Cheng et al. (1980), Cheng et al. (1982), Chiou et al. (2000), and Li et al. (2004, 2005, 2006, 2007). In this study, we reexamined these specimens and scanned them. The majority of these type collections were made by Japanese taxonomists, such as B. Hayata, T. Ito, T. Kawakami, S. Sasaki, and U. Mori. These specimens have been preserved since the early 20th century.

The determination of what nomenclatural types the specimens belong to is not easy, because both the protologue and labels of specimens are often very vague. Also, discrepancies appear between the original citations and the record on the specimen labels. For example, information provided in the protologue may be missing from the specimen labels, one or more of the collector ’s names on the labels may be missing from the original citation, complete collection date information may be found on either the label or the citation only, and so on. In addition, in most cases, Hayata (and other Japanese who published new species accounts) did not designate type specimen(s) in the protologue. All these factors make it difficult to judge the specimen types. Even in the case of a specimen with a collection number which agrees with the protologue, sometimes we are not sure if there are any duplicates in other herbaria. Thus, herein we mostly follow Sasaki (1930), then-curator of the TAIF, who worked with other Japanese taxonomists when they made collections in Taiwan, while denoting discrepancies (if any) under the figure captions between the protologue and labels. In most cases, when we were unable to tell what kind of type a specimen was, we used “type” only to label those specimens.

Locality names are another big challenge because one locality may have had several different spellings while Taiwan was ruled by Japan as sometimes even encountered today. For such localities, we referred to Chu and Yamanaka (1973, 1975), Kyoda (1989), and Huang et al. (1993). Currently recognized locality names are given in the notes following the spelling used in the protologue.

The caption of each figure includes the original name, original publication and date, and the kind of type it is; its locality, collector(s), collection numbers, date shown on the label, access number of TAIF; and a note of any discrepancies between the label and the protologue.

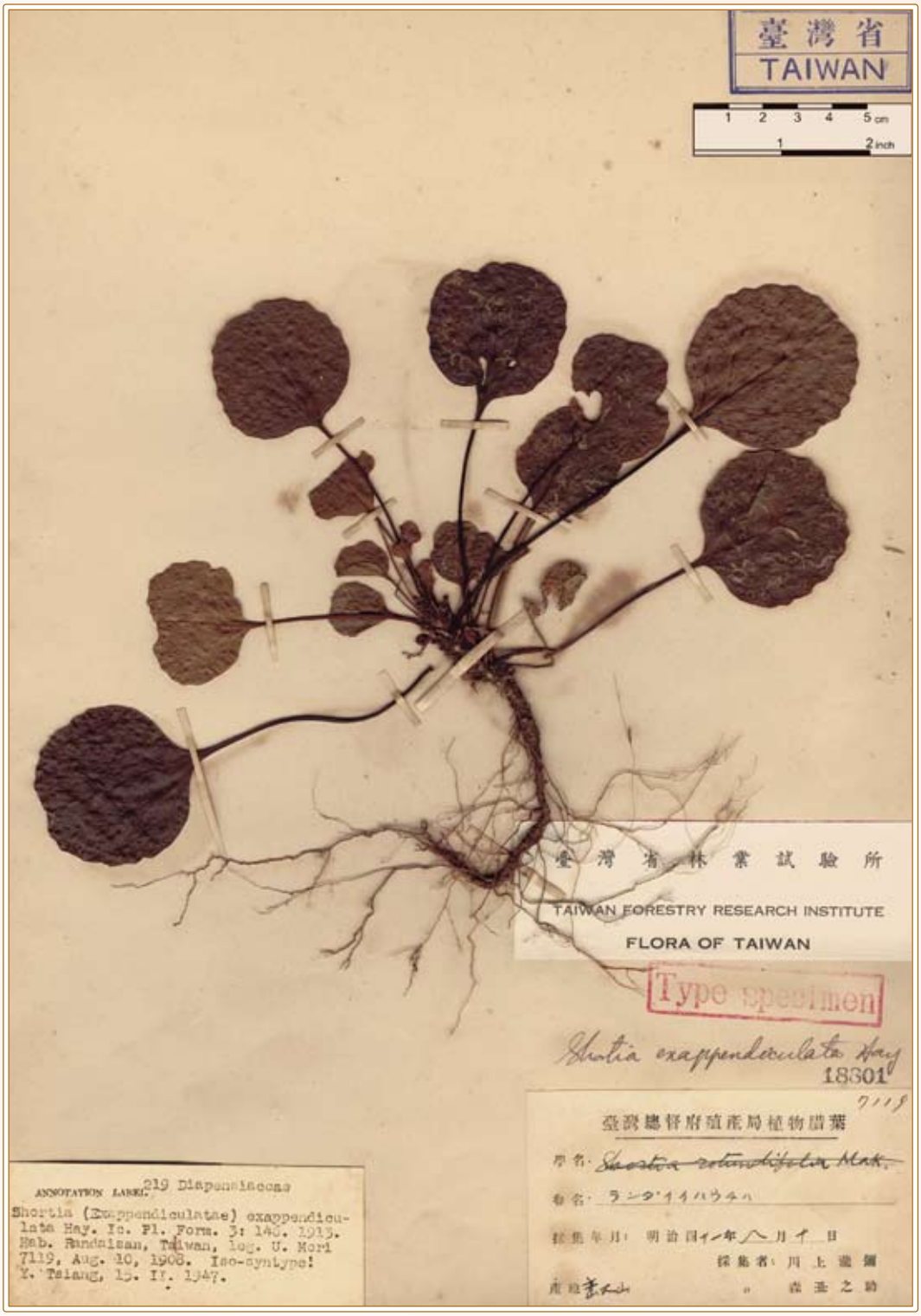
Type specimens are the most important basis for taxonomic studies, and thus it is necessary to permanently preserve them in a secure environment. Specimen loans between herbaria are





common and essential for taxonomic review. Damage to these specimens, however, is often unavoidable during shipment and examination. In addition, many researchers are located a long way from the herbarium and thus are unable to examine those specimens with ease. In order to reduce the unnecessary damage to these specimens and to make access more convenient for researchers, we have endeavored to scan the type specimens stored at TAIF and to publish those images. This is the 6th part in the series, involving 13 families, 37 genera, 84 species and 6 varieties of dicotyledon. The family arrangement follows the system of Engler and Diels (1936). Infra-family taxa are arranged alphabetically by genera and species. When a taxon has more than one sheet of specimens, they are arranged sequentially by the accession number of TAIF.

This project was supported by the National Digital Archive Program of the National Science Council, Taiwan (NSC96-2422-H-054-001) and the Japan-Taiwan Joint Research Program operated by the Interchange Association, Japan.



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1] Taiwan, Randaisan. *T. Kawakami et U. Mori 7119*, 10 Aug 1908[2] (TAIF 18801).

[1] Sasaki (1930) listed it as a type.

[2] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1)] Taiwan, Nanto, Randaisan. *T. Kawakami et U. Mori 3177*, 30 July 1907[2)] (TAIF 18802).

[1)] Sasaki (1930) listed it as a type.

[2)] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1)] *s. loco*.[2)] *T. Kawakami et U. Mori s. n.*, July 1907[3)] (TAIF 18810).

[1)] Sasaki (1930) listed it as a type.

[2)] Randaisan;

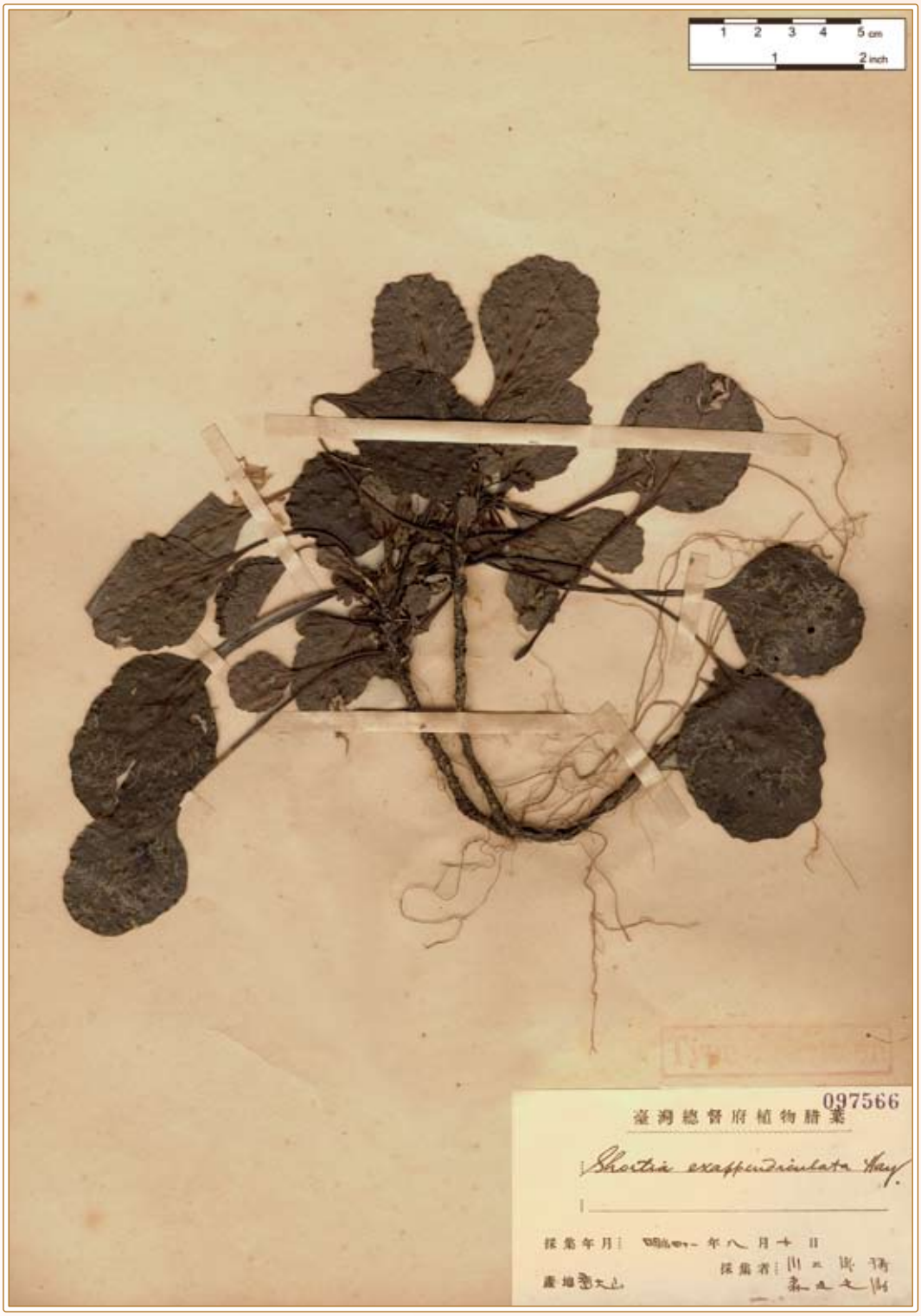
[3)] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1)] Taiwan, Randaisan. *T. Kawakami et U. Mori s. n.*, 10 Aug 1908[2)] (TAIF 97565).

[1)] Possibly a duplicate of specimen TAIF 18801.

[2)] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1)] Taiwan, Randaisan. *T. Kawakami et U. Mori s. n.*, 10 Aug 1908[2)] (TAIF 97566).

[1)] Possibly a duplicate of specimen TAIF 18801.

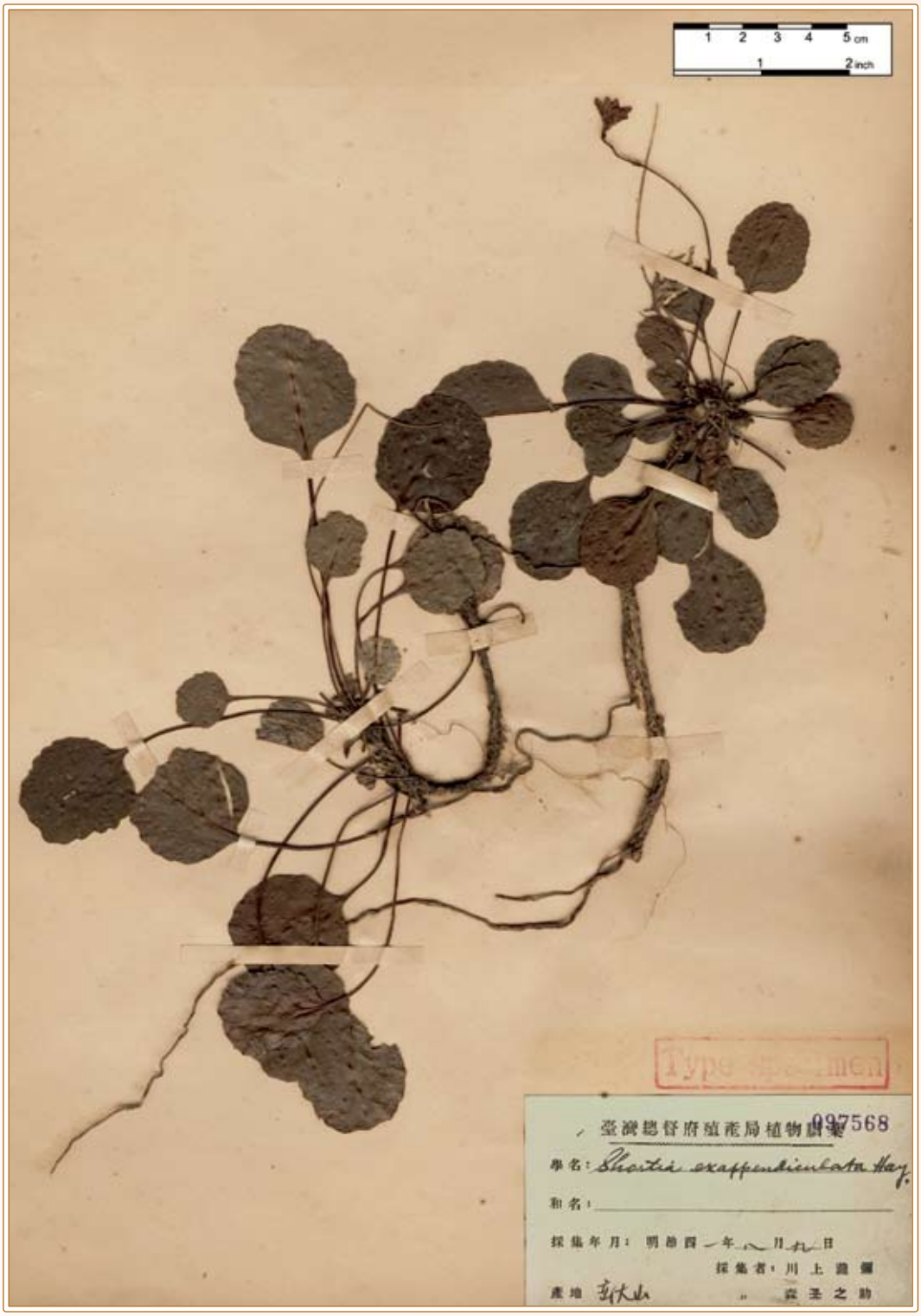
[2)] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1)] Taiwan, Randaisan. *T. Kawakami et U. Mori s. n.*, 10 Aug 1908[2)] (TAIF 97567).

[1)] Possibly a duplicate of specimen TAIF 18801.

[2)] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1)] Taiwan, Randaisan. *T. Kawakami et U. Mori s. n.*, 9 Aug 1908[2)] (TAIF 97568).

[1)] Possibly a duplicate of specimen TAIF 18801.

[2)] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1)] Taiwan, Randaisan. *T. Kawakami et U. Mori s. n.*, 9 Aug 1908[2)] (TAIF 97569).

[1)] Possibly a duplicate of specimen TAIF 18801.

[2)] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia exappendiculata Hayata, Icon. Pl. Formos. 3:146, *t. 27*. 1913. Syntype.[1)] Taiwan, Randaisan. *T. Kawakami et U. Mori s. n.*, 9 Aug 1908[2)] (TAIF 97570).

[1)] Possibly a duplicate of specimen TAIF 18801.

[2)] Leg. *U. Mori*, Aug 1908 (Hayata 1913).



Shortia ritoensis Hayata, Icon. Pl. Formos. 4:17. 1914. Type.[1)] Taiwan, Mt. Ritozan. *T. Kawakami s. n.*, July 1914[2)] (TAIF 18797).

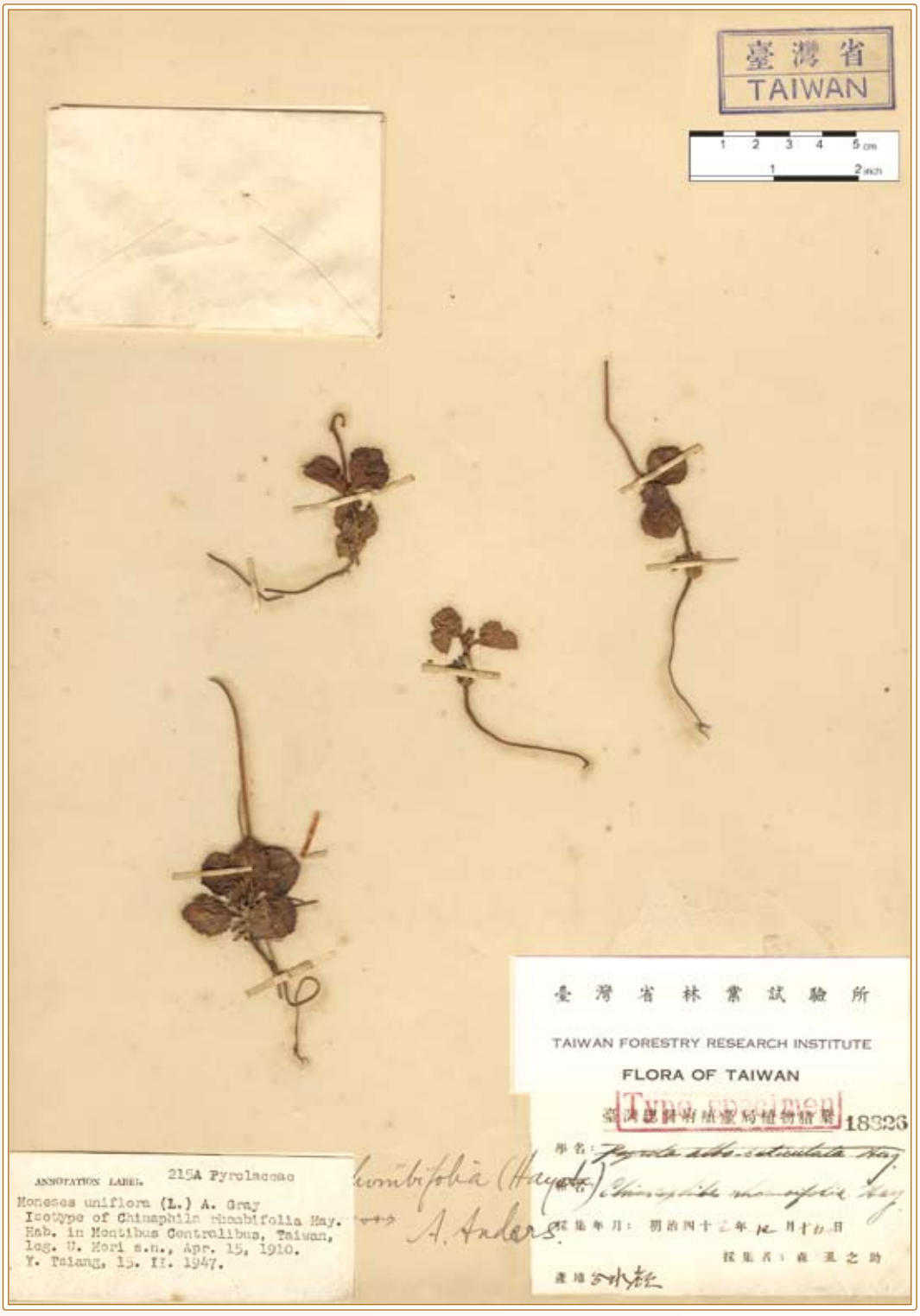
[1)] Sasaki (1930) listed TAIF 18798 with the same locality as a type. That specimen, however, was collected from Rengeti, not from Mt. Ritozan.

[2)] July 1913 (Hayata 1914).



Chimaphila rhombifolia Hayata, Icon. Pl. Formos. 2:119, *pl. 16*. 1912. Type. Taiwan, Montibus centralibus. *U. Mori s. n.*, 13 Apr 1910[1)] (TAIF 18824).

[1)] Apr 1910 (Hayata 1912).



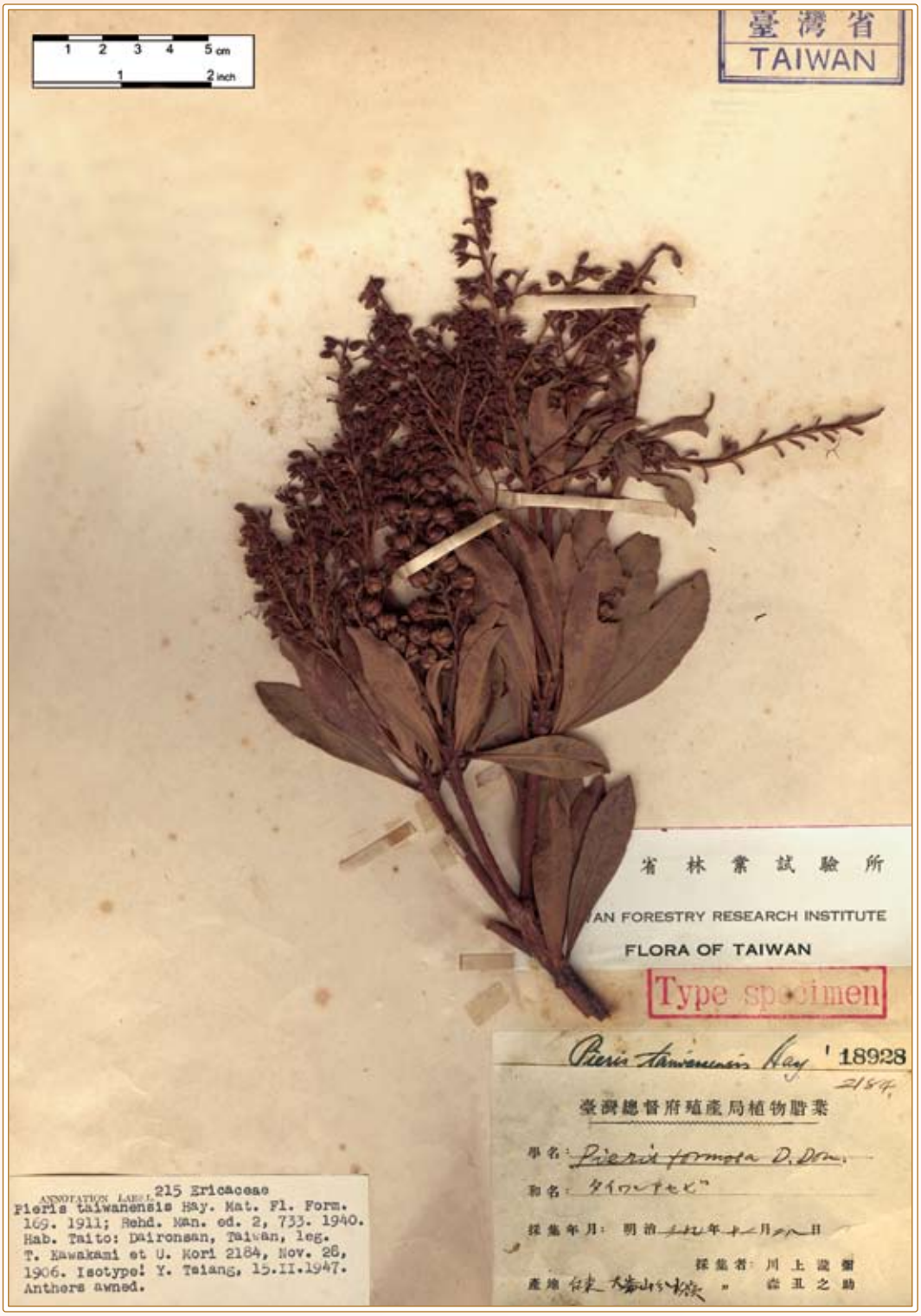
Chimaphila rhombifolia Hayata, Icon. Pl. Formos. 2:119, *pl. 16*. 1912. Type. Taiwan, Montibus centralibus. *U. Mori s. n.*, 15 Apr 1910 [1)] (TAIF 18826).

[1)] Apr 1910 (Hayata 1912).



Pyrola alboreticulata Hayata, Icon. Pl. Formos. 3:142, *t. 25*. 1913. Syntype. Taiwan, Arisan. *B. Hayata et S. Sasaki s. n.*, 21 Jan 1912[1)] (TAIF 18845).

[1)] Jan 1912 (Hayata 1913).



Pieris taiwanensis Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):169. 1911. Type. Taiwan, Taito, Daironsan. *T. Kawakami et U. Mori 2184*, 28 Nov 1906 [1)] (TAIF 18928).

[1)] Collection date unrecorded (Hayata 1911).

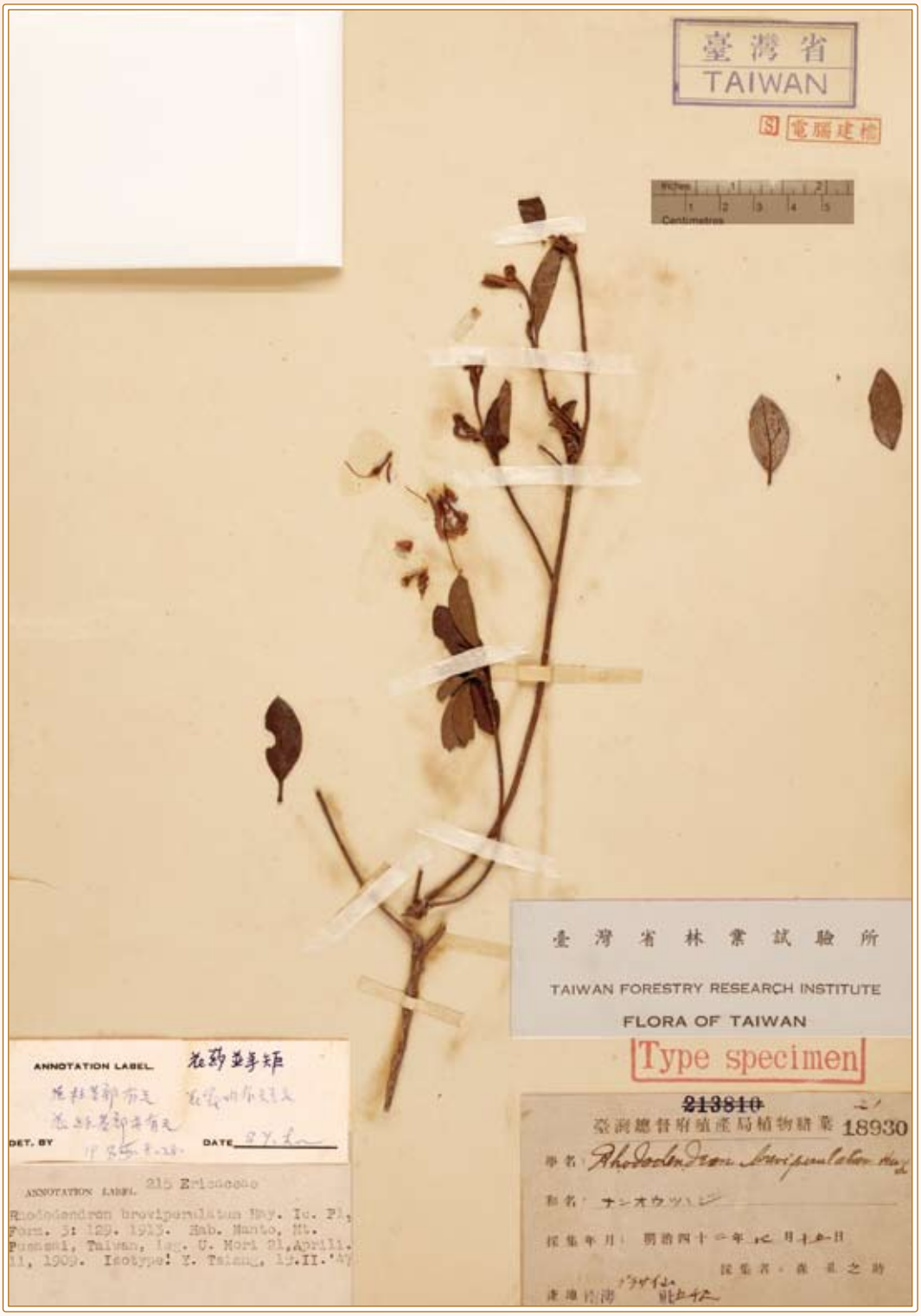


Rhododendron breviperulata Hayata, Icon. Pl. Formos. 3:129. 1913. Type.[1)] Taiwan, Nanwo, Piyahausha, Mt. Egiri, ad 6,000 ped. alt.[2)] *U. Mori 21*, 11 Apr 1909[3)] (TAIF 18929).

[1)] Sasaki (1930) did not list it as a type, but Y. Tsiang treated it as an isotype on the annotation.

[2)] Nanto, Mt. Pusasai;

[3)] Leg. *U. Mori*, Apr 1909 (Hayata 1913).



Rhododendron breviperulata Hayata, Icon. Pl. Formos. 3:129. 1913. Type.[1] Taiwan, Nanwo, Mt. Purasai, ad 5,000 ped. alt.[2] *U. Mori 21*, 15 Apr 1909[3] (TAIF 18930).

[1] Sasaki (1930) listed it as a type.

[2] Nanto, Mt. Pusasai;

[3] Leg. *U. Mori*, Apr 1909 (Hayata 1913).



Rhododendron hyperythrum Hayata, Icon. Pl. Formos. 3:133. 1913. Type.[1)] Taiwan, Tekasan, ad 6,000 ped. alt.[2)] *N. Konishi s. n.*, 4 Mar 1909[3)] (TAIF 18956).

[1)] Sasaki (1930) listed it as a type.

[2)] Formosa: *regionibus meridionalibus*;

[3)] Collection date unrecorded (Hayata 1913).



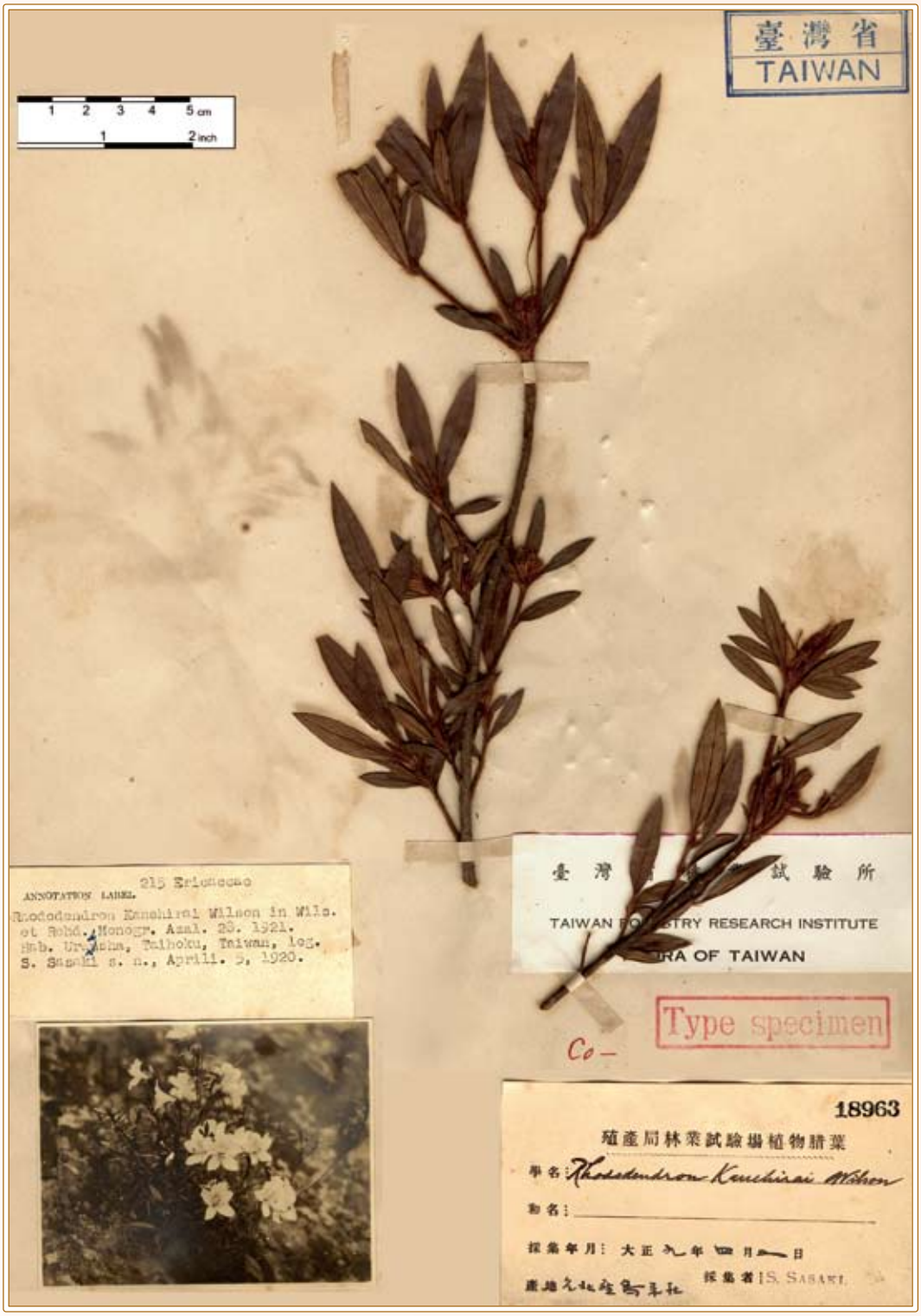
Rhododendron hyperythrum Hayata, Icon. Pl. Formos. 3:133. 1913. Type.[1)] Taiwan, Tekasan.[2)] *N. Konishi s. n.*, 4 Mar 1909[3)] (TAIF 18957[4)]).

[1)] Sasaki (1930) listed it as a type.

[2)] Formosa: *regionibus meridionalibus*;

[3)] Collection date unrecorded (Hayata 1913).

[4)] The leaf at the top right is suspect due to the Chinese annotation written on the sheet.



Rhododendron kanehirai Wilson, Monogr. Azal. 28. 1921. Topotype.[1)] Taiwan, Taihoku, Uraisha.[2)] *S. Sasaki s. n.*, 5 Apr 1920[3)] (TAIF 18963).

[1)] Sasaki (1930) listed it as a type.

[2)] prov. Taihoku, Urai, in a garden at the police station;

[3)] Leg. *E. H. Wilson* (No. 10, 276), Apr 1, 1918 (Wilson & Rehder 1921).



Rhododendron kanehirai Wilson, Monogr. Azal. 28. 1921. Topotype.[1)] Taiwan, Taihoku, Uraisha.[2)] *S. Sasaki s. n.*, 5 Apr 1920[3)] (TAIF 18964).

[1)] Sasaki (1930) listed it as a type.

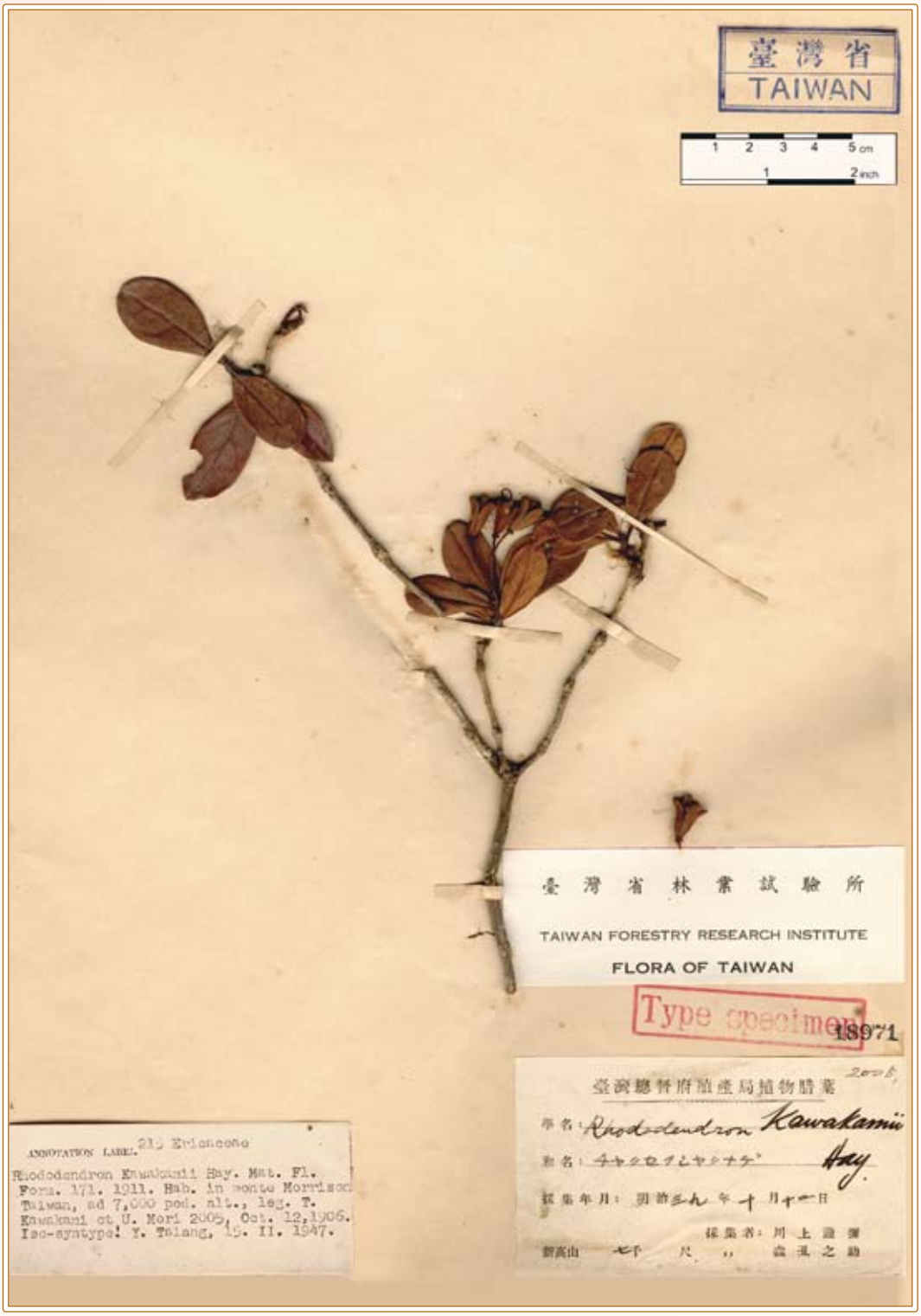
[2)] prov. Taihoku, Urai, in a garden at the police station;

[3)] Leg. *E. H. Wilson* (No. 10, 276), Apr 1, 1918 (Wilson & Rehder 1921).



Rhododendron kawakamii Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):171. 1911. Syntype. Taiwan, Randaizan. *T. Kawakami, B. Hayata et U. Mori 7002*, 9 Aug 1908 [1] (TAIF 18968).

[1] Leg. *B. Hayata et U. Mori*, Aug 1908, (No. 7002) (Hayata 1911).



Rhododendron kawakamii Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):171. 1911. Syntype. Taiwan, in monte Morrison, ad 7,000 ped. alt. *T. Kawakami et U. Mori 2005*, 12 Oct 1906[1)] (TAIF 18971).

[1)] Oct 1906 (Hayata 1911).



Rhododendron leiopodum Hayata, Icon. Pl. Formos. 3:136, *t. 24*. 1913. Type.[1)] Taiwan, Shichiseitonsan. *S. Sasaki s. n.*, Mar 1911[2)] (TAIF 18974).

[1)] Sasaki (1930) listed it as a type.

[2)] Apr 1911 (Hayata 1913).



Rhododendron leiopodum Hayata, Icon. Pl. Formos. 3:136, *t. 24*. 1913. Type. Taiwan, Shichiseitonsan. *S. Sasaki s. n.*, Apr 1911 (TAIF 18975).



Rhododendron leiopodum Hayata, Icon. Pl. Formos. 3:136, *t. 24*. 1913. Type. Taiwan, Shichiseitonsan. *S. Sasaki s. n.*, Apr 1911 (TAIF 18976).



Rhododendron leptosanthum Hayata, Icon. Pl. Formos. 3:137. 1913. Type.[1] Taiwan, Taito, Sinsuiei.[2] *T. Kawakami et U. Mori 5838*, Apr 1907[3] (TAIF 18988).

[1] Sasaki (1930) did not list it as a type, but an anonymous annotation conjectured it might be an isotype.

[2] In montibus prope Ako, ad 5,000 ped. alt;

[3] Leg. *T. Kawakami*, 1907 (Hayata 1913).



Rhododendron longiperulatum Hayata, Icon. Pl. Formos. 3:138. 1913. Type. Taiwan, Mt. Daiton. *Y. Shimada s. n.*, Aug 1910 (TAIF 18992).



Rhododendron morii Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):173. 1911. Syntype. Taiwan, Randaizan. *T. Kawakami et U. Mori 7041*, 9 Aug 1908 [1] (TAIF 19003).

[1] Leg. *U. Mori*, Aug 1906, (No. 7041) (Hayata 1911).



Rhododendron morii Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):173. 1911. Syntype.[1)] Taiwan, Randaizan. *T. Kawakami et U. Mori s. n.*, 10 Aug 1908[2)] (TAIF 19004).

[1)] Sasaki (1930) listed it as a type.

[2)] Leg. *U. Mori*, Aug 1906, (No. 7041) (Hayata 1911).



Rhododendron morii Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):173. 1911. Syntype.[1)] Taiwan, Randaizan. *T. Kawakami et U. Mori s. n.*, 10 Aug 1908[2)] (TAIF 213802).

[1)] Possibly a duplicate of TAIF 19004.

[2)] Leg. *U. Mori*, Aug 1906, (No. 7041) (Hayata 1911).



Rhododendron morii Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):173. 1911. Syntype.[1)] Taiwan, Randaizan. *T. Kawakami et U. Mori s. n.*, 9 Aug 1908[2)] (TAIF 213804).

[1)] Possibly a duplicate of TAIF 19003.

[2)] Leg. *U. Mori*, Aug 1906, (No. 7041) (Hayata 1911).



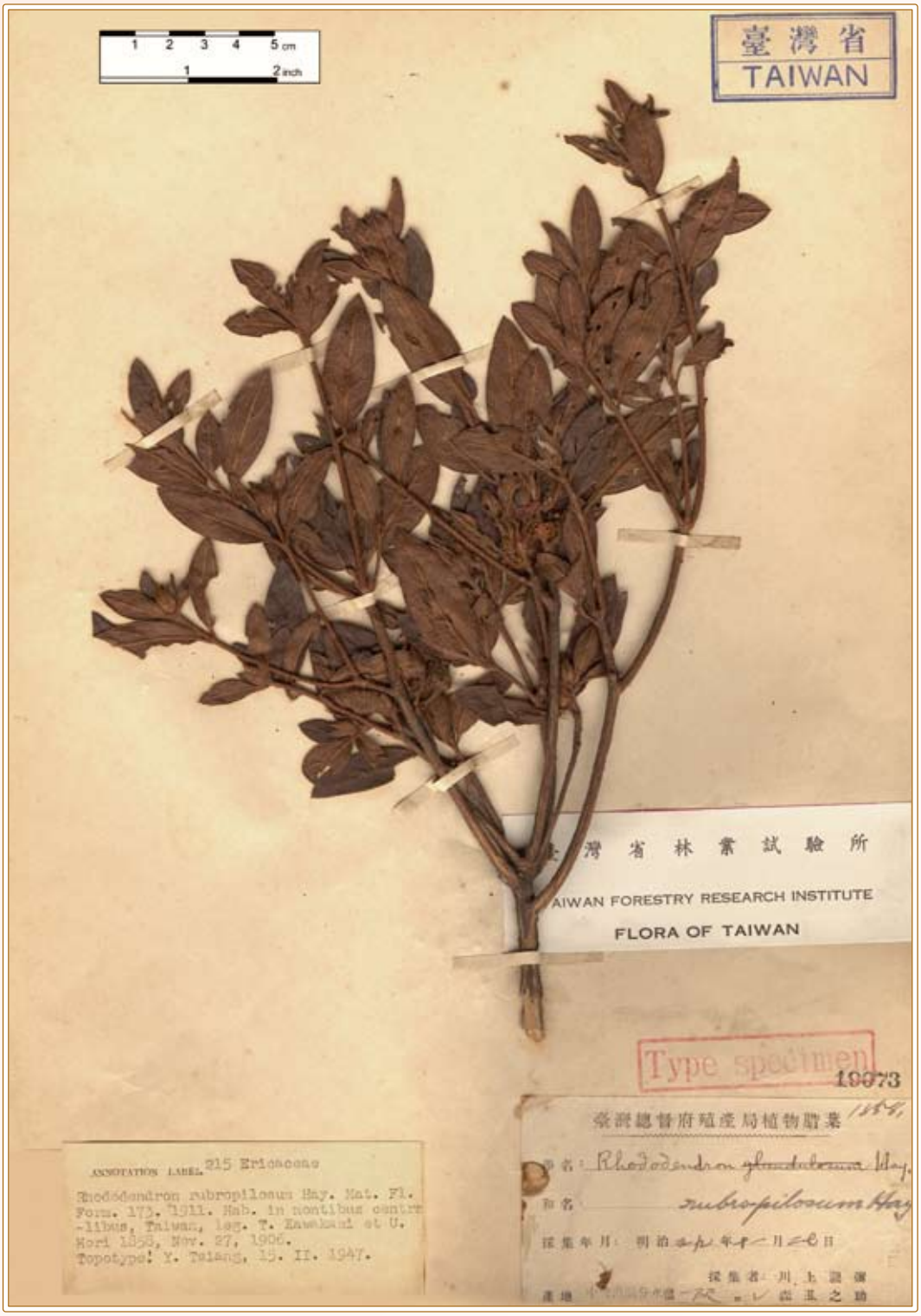
Rhododendron nankotaisanense Hayata, Icon. Pl. Formos. 9:66. 1920. Type. Taiwan, Nankotaisan. *B. Hayata et S. Sasaki 57*, 29 Apr 1917[1)] (TAIF 19019).

[1)] Leg. *S. Sasaki*, No. 57, Apr 1917 (Hayata 1920).



Rhododendron pseudo-chrysanthum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):154, *pl. 26*. 1908. Syntype. Taiwan, in monte Morrison, ad 13,000 ped. alt. *T. Kawakami et U. Mori 2144*, 18 Nov 1906[1)] (TAIF 19053).

[1)] Nov 1906 (Hayata 1908).



Rhododendron rubro-pilosum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):173. 1911. Syntype.[1] Taiwan, in Montibus Centralibus, ad 10,000 ped. alt.[2] *T. Kawakami et U. Mori 1858*, 27 Nov 1906[3] (TAIF 19073).

[1] Sasaki (1930) listed it as a type.

[2] in Montibus Centralibus;

[3] Leg. *T. Kawakami et U. Mori*, Nov 1906, (Nos. 1857 *et* 1859) (Hayata 1911).



Rhododendron rubro-pilosum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):173. 1911. Syntype. Taiwan, Randaizan. *T. Kawakami et B. Hayata 7044*, 9 Aug 1908 [1] (TAIF 19075).

[1] Leg. *B. Hayata et U. Mori*, Aug 1908, (No. 7044) (Hayata 1911).



Rhododendron rubropunctatum Hayata, Icon. Pl. Formos. 3:141. 1913. Type.[1)] Taiwan, Mt. Shichiseitonzan. *S. Sasaki s. n.*, Mar 1911[2)] (TAIF 18953).

[1)] Sasaki (1930) listed it as a type.

[2)] Apr 1910 (Hayata 1913).

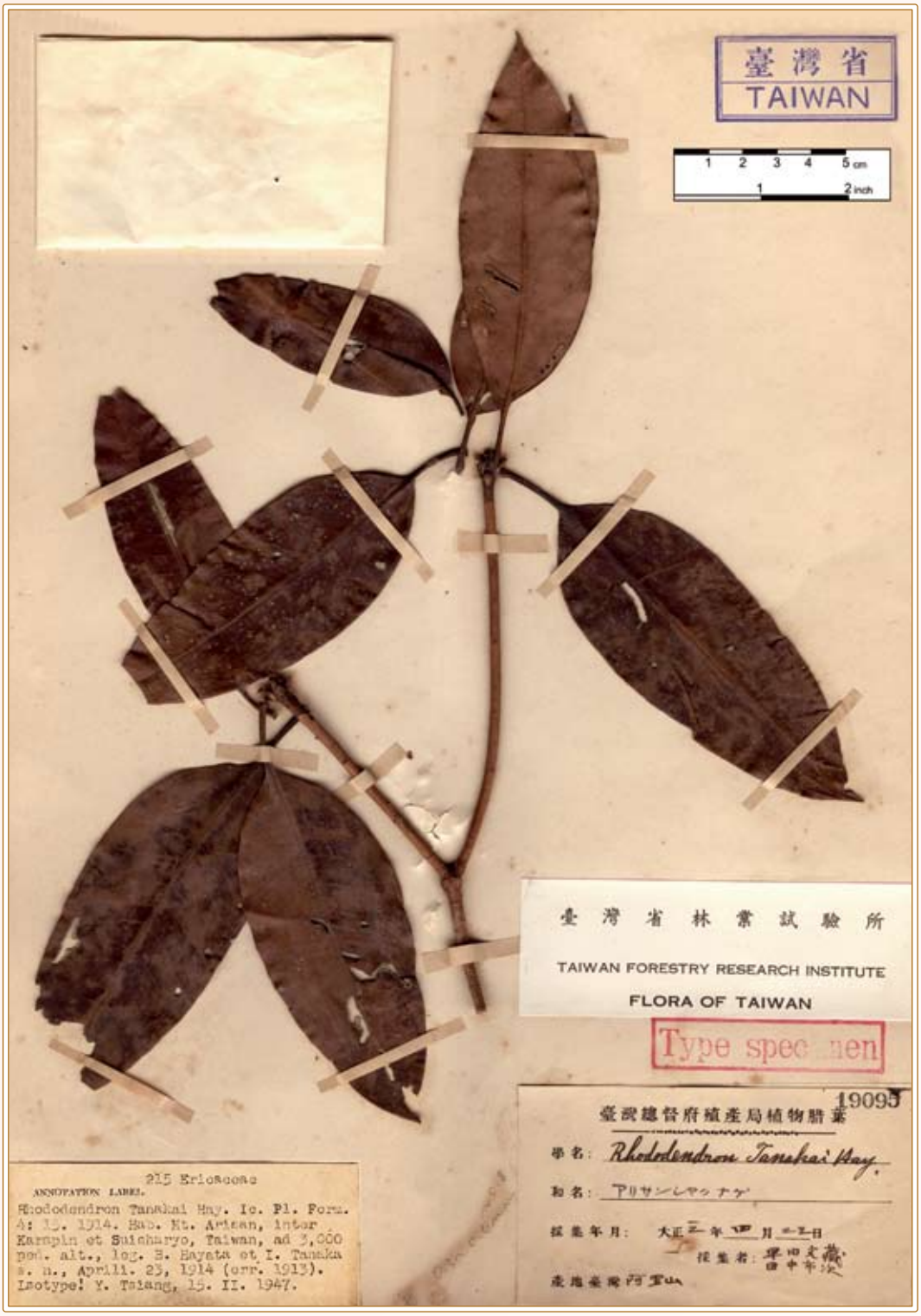


Rhododendron tanakai Hayata, Icon. Pl. Formos. 4:15. 1914. Type.[1)] Taiwan, Mt. Arisan, Zyuziro.[2)] *B. Hayata, I. Tanaka et R. Kanehira s. n.*, 25 Apr 1914[3)] (TAIF 19094).

[1)] Sasaki (1930) listed it as a type.

[2)] Mt. Arisan: inter Karapin *et* Suisharyo, ad 3,000 ped. alt.;

[3)] Leg. *B. Hayata et I. Tanaka*, Apr 1913 (Hayata 1914).



Rhododendron tanakai Hayata, Icon. Pl. Formos. 4:15. 1914. Type.[1)] Taiwan, Mt. Arisan.[2)] *B. Hayata et I. Tanaka s. n.*, 23 Apr 1914[3)] (TAIF 19095).

[1)] Sasaki (1930) listed it as a type.

[2)] Mt. Arisan: inter Karapin *et* Suisharyo, ad 3,000 ped. alt.;

[3)] Apr 1913 (Hayata 1914).



Vaccinium caudatifolium Hayata, Icon. Pl. Formos. 3:127, *t. 22*. 1913. Syntype.[1)] Taiwan, Montibus Arisan.[2)] *S. Sasaki s. n.*, 21 Jan 1912[3)] (TAIF 19113).

[1)] Sasaki (1930) listed it as a type.

[2)] Montibus Arisan: Nimandaira, ad truncos *Querci* sp.;

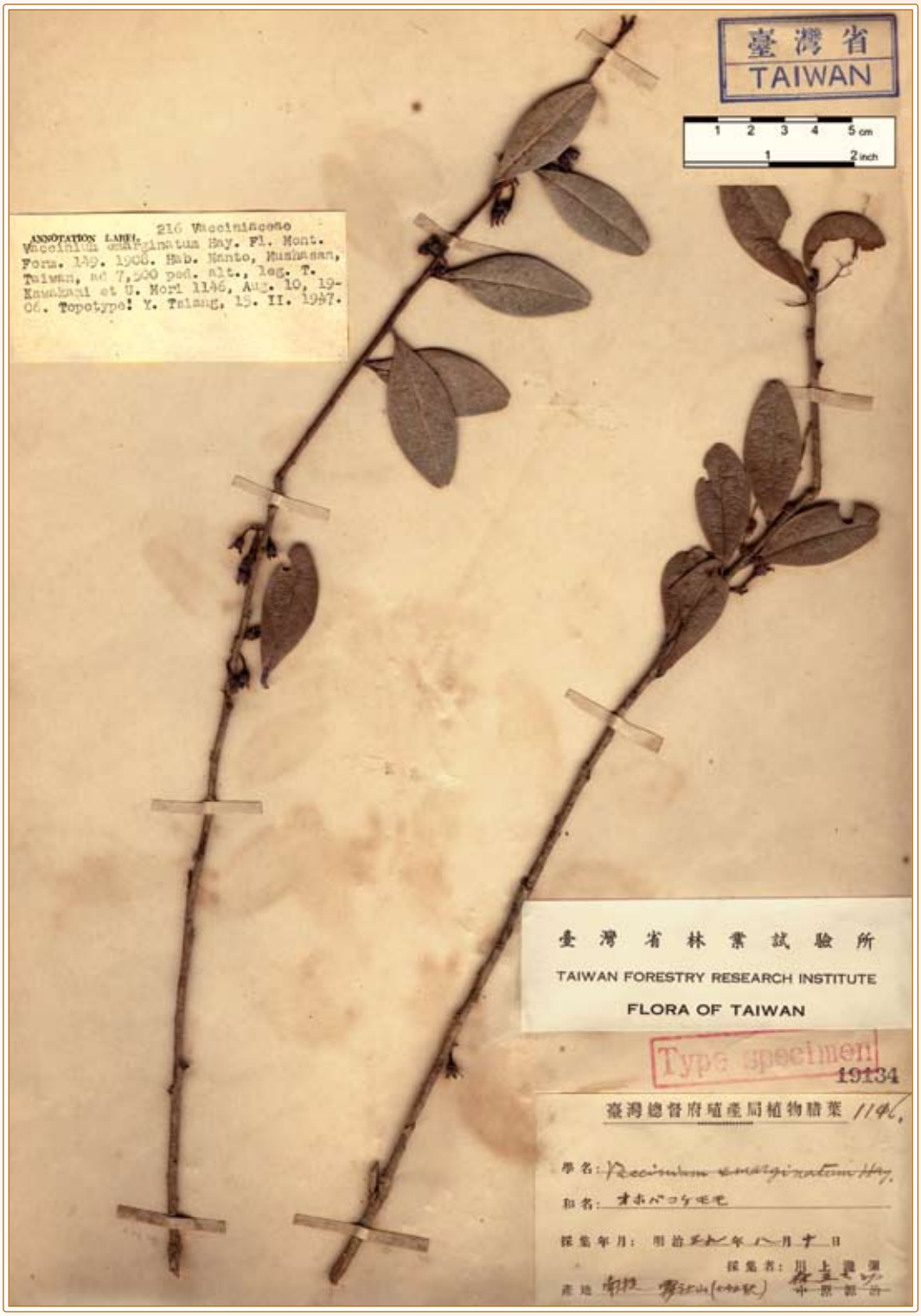
[3)] Leg. *B. Hayata et S. Sasaki*, Jan 1912 (Hayata 1913).



Vaccinium caudatifolium Hayata, Icon. Pl. Formos. 3:127, *t. 22*. 1913. Syntype.[1)] Taiwan, Montibus Arisan.[2)] *B. Hayata et S. Sasaki s. n.*, Jan 1912 (TAIF 19114).

[1)] Sasaki (1930) listed it as a type.

[2)] Montibus Arisan: Nimandaira, ad truncos *Querci* sp. (Hayata 1913).



Vaccinium emarginatum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):149. 1908. Syntype.[1)] Taiwan, Nanto, Mushasan, ad 7,500 ped. alt. *T. Kawakami et U. Mori 1146*, 10 Aug 1906[2)] (TAIF 19134).

[1)] Sasaki (1930) listed it as a type.

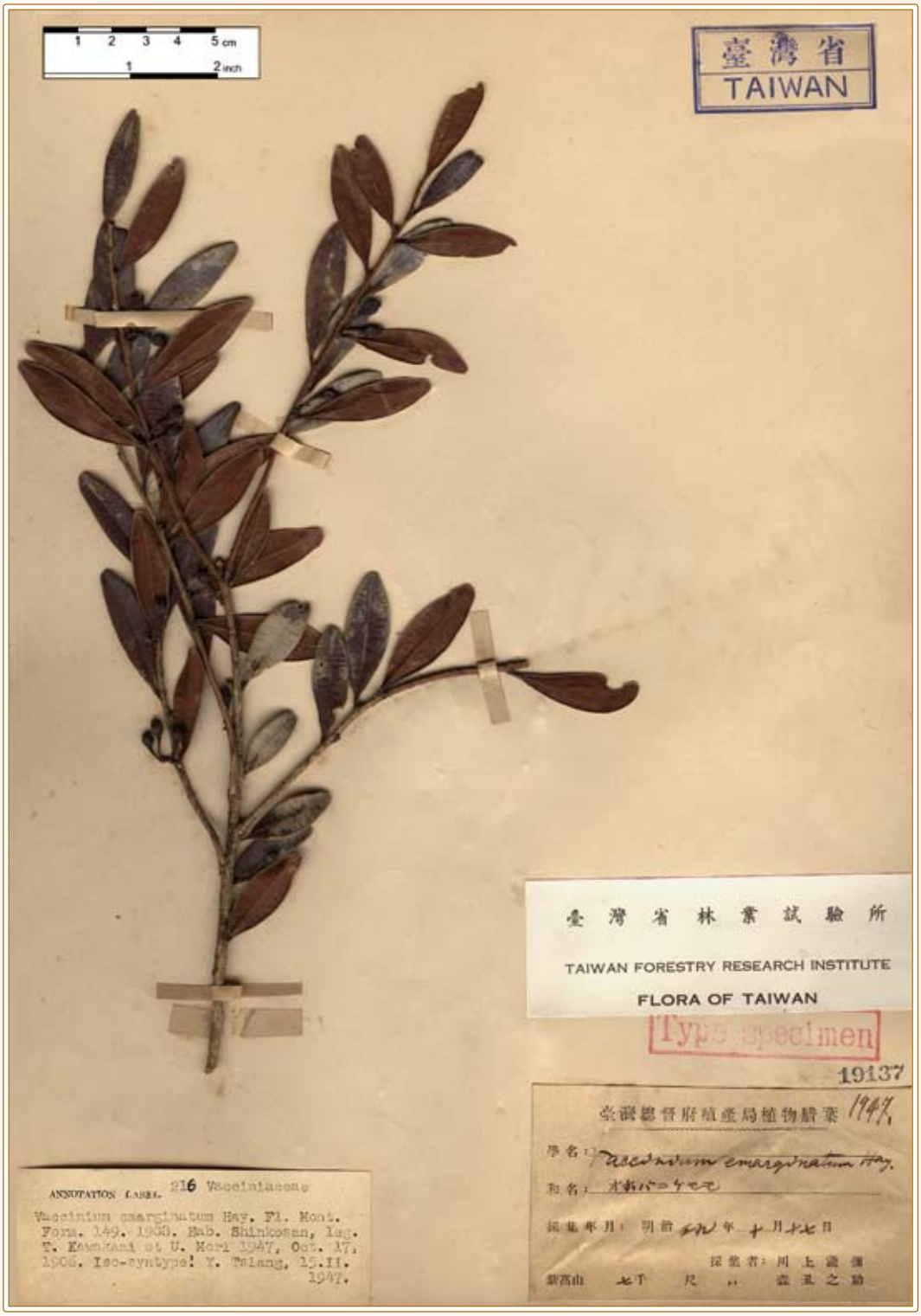
[2)] Leg. *T. Kawakami et U. Mori*, Aug 1906, (Nos. 71461, 1178 *et* 1143) (Hayata 1908); collection No. 71461 possibly an error of 1146.



Vaccinium emarginatum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):149. 1908. Syntype. Taiwan, Nanto, Mushasan, ad 7,000 ped. alt.[1] *T. Kawakami et U. Mori 1143*, 10 Aug 1906[2] (TAIF 19135).

[1] Nanto: Mushasan, ad 7,500 ped. alt.;

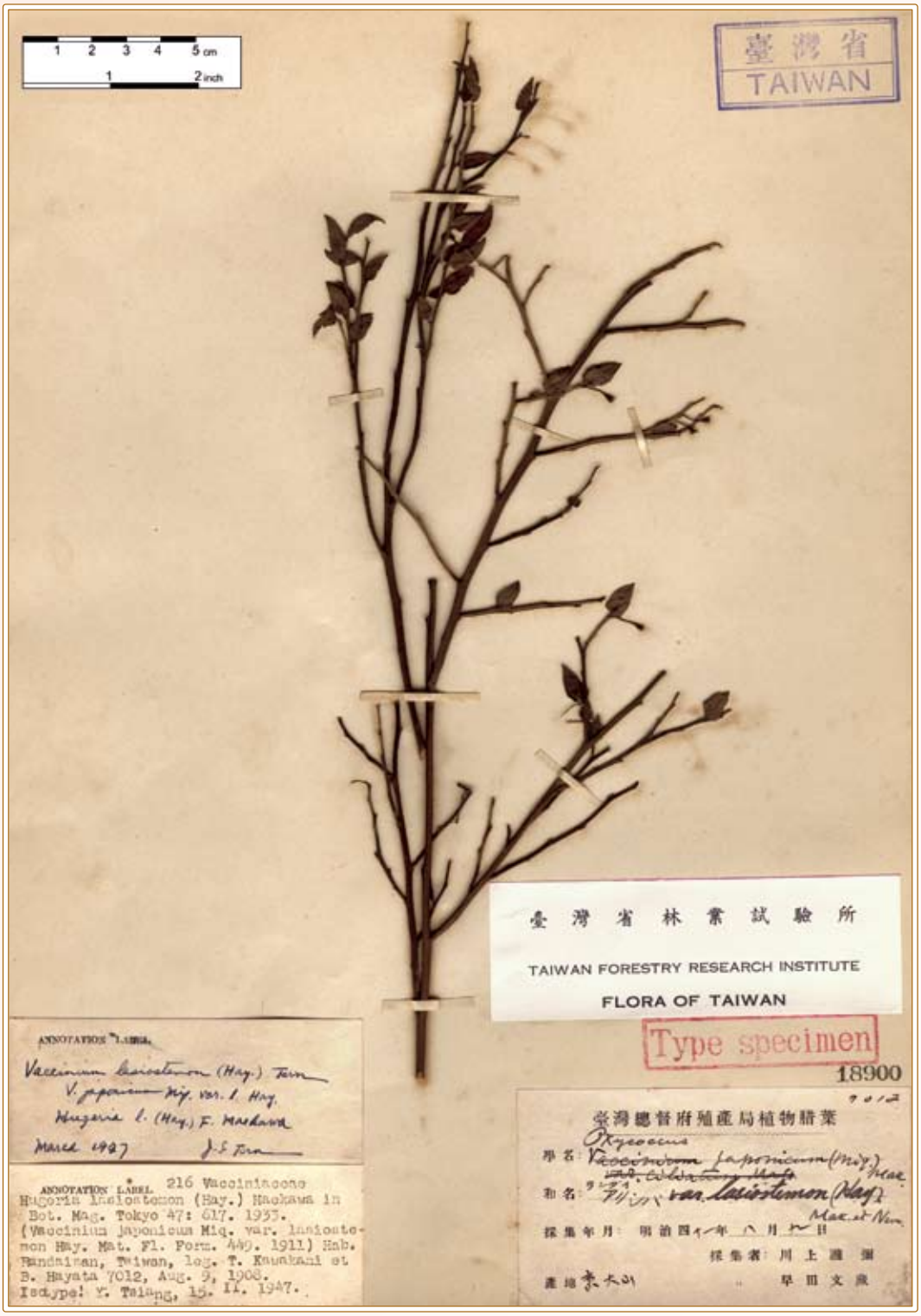
[2] Aug 1906 (Hayata 1908).



Vaccinium emarginatum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):149. 1908. Syntype. Taiwan, in monte Morrison, ad 7,000 ped. alt.[1)] *T. Kawakami et U. Mori 1947*, 17 Oct 1906[2)] (TAIF 19137).

[1)] in monte Morrison;

[2)] Oct 1906 (Hayata 1908).



Vaccinium japonicum Miq. var. *lasiostemon* Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):449. 1911. Type.[1)] Taiwan, Randaisan. *T. Kawakami et B. Hayata 7012*, 9 Aug 1908[2)] (TAIF 18900).

[1)] Hayata (1911) did not cite any specimen, but cited it in Hayata (1912, *p. 115*).

[2)] Leg. *B. Hayata et U. Mori*, (No. 7012); collection date unrecorded (Hayata 1912).



Vaccinium japonicum Miq. var. *lasiostemon* Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):449. 1911. Type.[1)] Taiwan, Randaisan. *T. Kawakami et U. Mori 7012*, 9 Aug 1908[2)] (TAIF 18901).

[1)] Hayata (1911) did not cite any specimen, but cited it in Hayata (1912, *p. 115*).

[2)] Leg. *B. Hayata et U. Mori*, (No. 7012); collection date unrecorded (Hayata 1912).



Vaccinium merrillianum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):149, *pl. 24*. 1908. Syntype. Taiwan, in montibus Morrison, ad 6,000 ped. alt. *T. Kawakami et U. Mori 1730*, 13 Oct 1906[1] (TAIF 19151).

[1] Oct 1906 (Hayata 1908).



Vaccinium merrillianum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):149, *pl. 24*. 1908. Syntype. Taiwan, in montibus Morrison, ad 10,000 ped. alt. *T. Kawakami et U. Mori 2286*, 20 Oct 1906[1)] (TAIF 19152).

[1)] Oct 1906 (Hayata 1908).



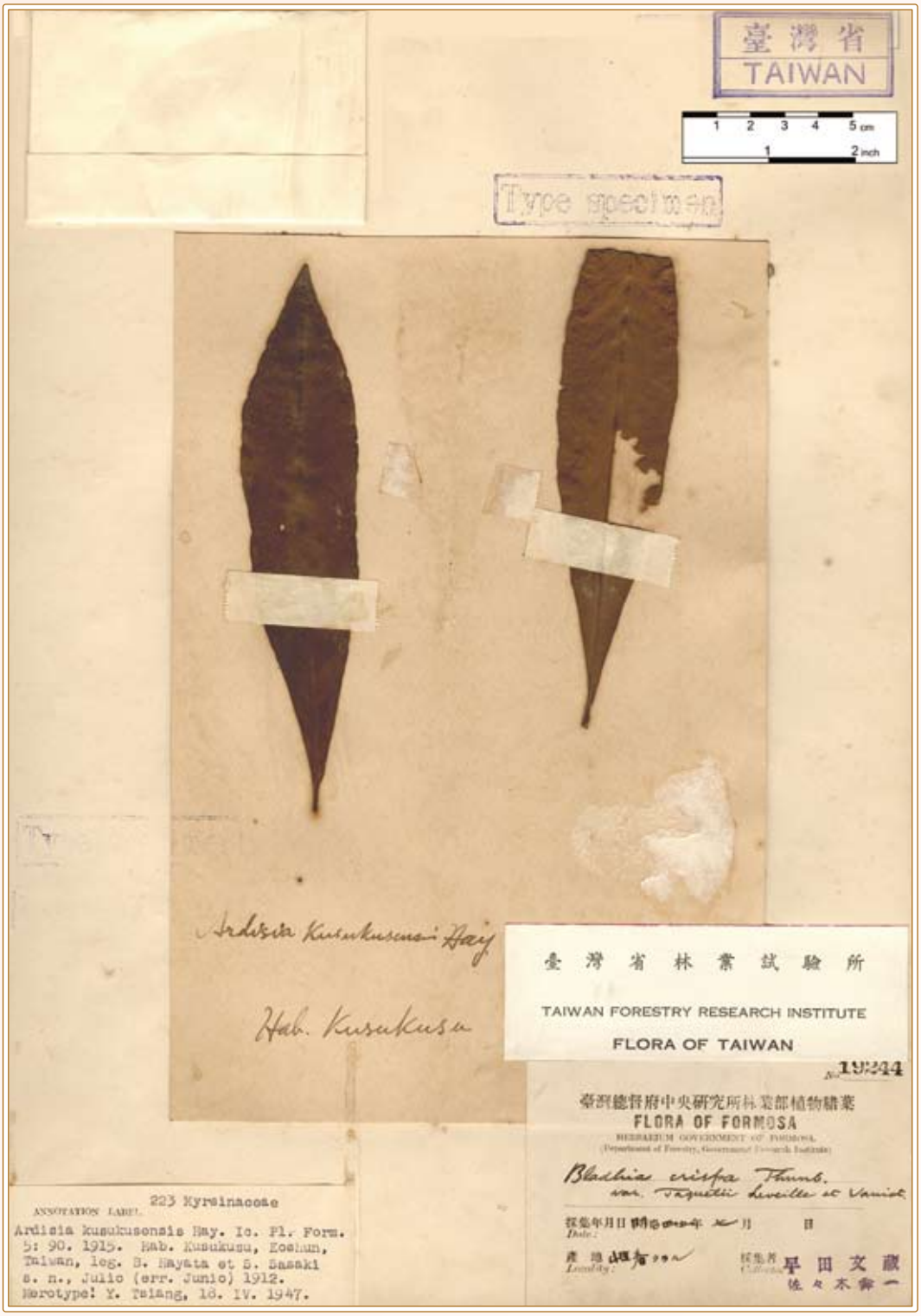
Vaccinium randaiense Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):168. 1911. Type. Taiwan, Randaisan. *T. Kawakami et U. Mori 7004*, 10 Aug 1908 [1] (TAIF 19160).

[1] Aug 1908 (Hayata 1911).



Ardisia konishii Hayata, Icon. Pl. Formos. 5:89. 1915. Type. China, Hainan. *S. Konishi 45*,[1)] June 1909 (TAIF 19245).

[1)] Leg. *S. Konishi* (Hayata 1915).



Ardisia kusukusensis Hayata, Icon. Pl. Formos. 5:90. 1915. Type (part).[1)] Taiwan, Koshun, Kuraru.[2)] *B. Hayata et S. Sasaki s. n.*, July 1912[3)] (TAIF 19244).

[1)] Sasaki (1930) did not list it as a type, but Y. Tsiang treated it as a merotype on the annotation, possibly because “Kusukusu” was noted on the sheet.

[2)] Kusukusu;

[3)] June 1912 (Hayata 1915).



Ardisia miaoliensis Lu, Q. J. Chin. For. 10(4):119, *f. 1, 2*. 1977. Isotype. Taiwan, Miaoli, Mt. Yang-Mei, ad 1,400 m alt. *S. Y. Lu 4634*, 12 July 1975 (TAIF 51057 a[1)]).

[1)] "a" was added to distinguish this from another duplicate.



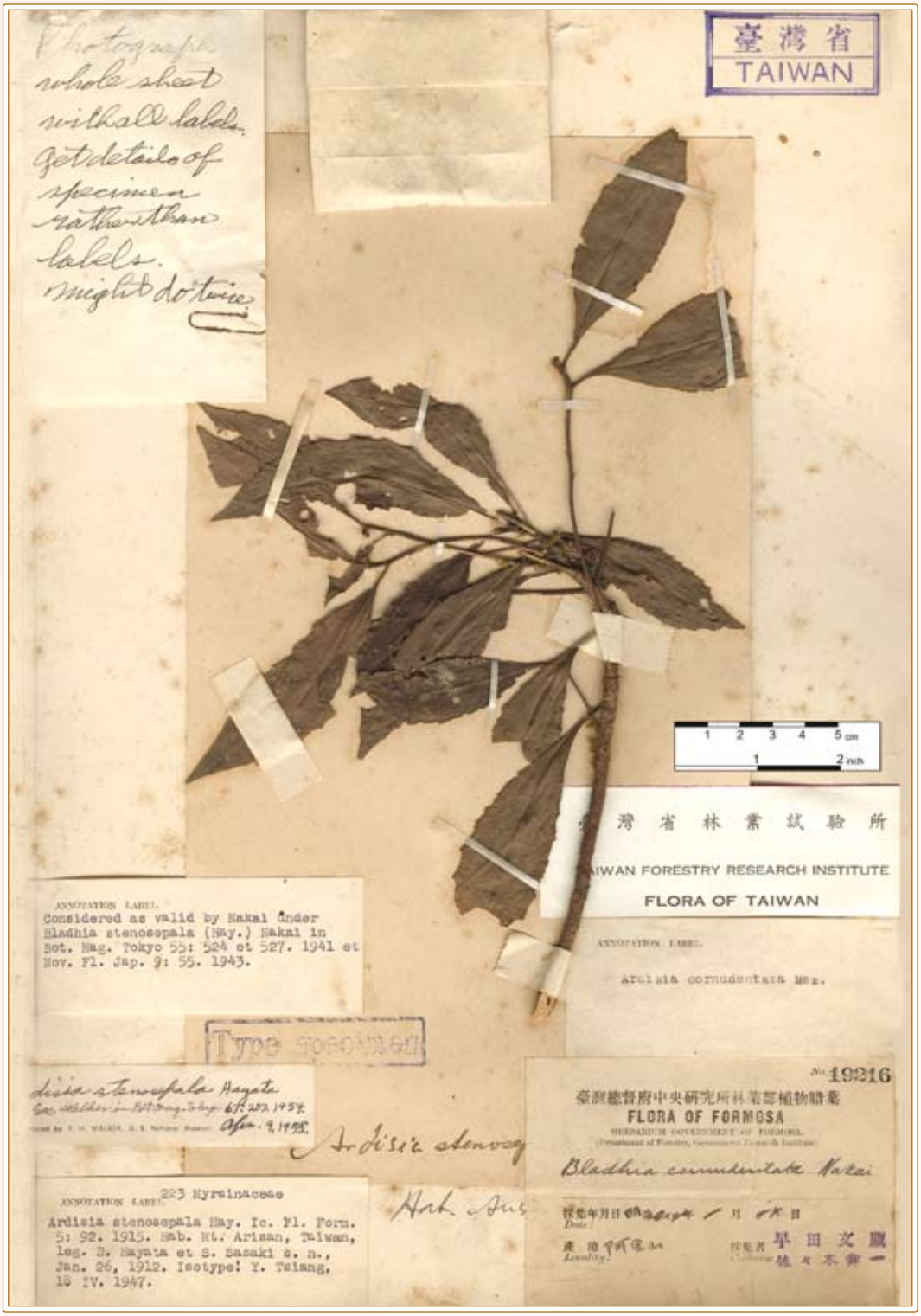
Ardisia miaoliensis Lu, Q. J. Chin. For. 10(4):119, *f. 1, 2*. 1977. Holotype. Taiwan, Miaoli, Mt. Yang-Mei, ad 1,400 m alt. *S. Y. Lu 4634*, 12 July 1975 (TAIF 51057 b[1)]).

[1)] "b" was added to distinguish this from another duplicate.



Ardisia rectangularis Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):182. 1911. Syntype. Taiwan, Shintiku, Goshizan. *T. Kawakami et U. Mori 1435*, 2 June 1906[1)] (TAIF 19239).

[1)] June 1906 (Hayata 1911).

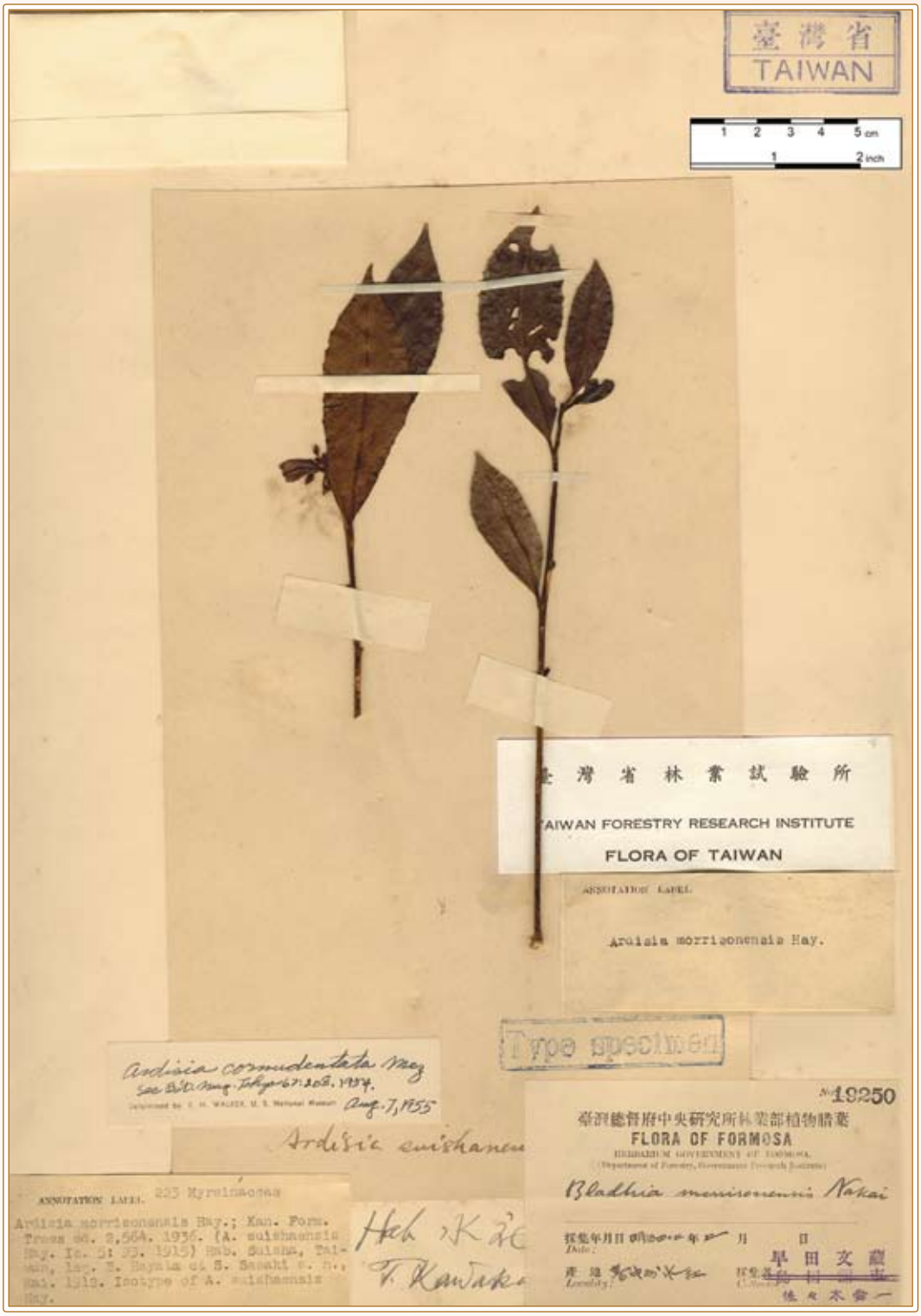


Ardisia stenosepala Hayata, Icon. Pl. Formos. 5:92. 1915. Type.[1)] Taiwan, Mt. Arisan.[2)] *B. Hayata et S. Sasaki s. n.*, 26 Jan 1912[3)] (TAIF 19216).

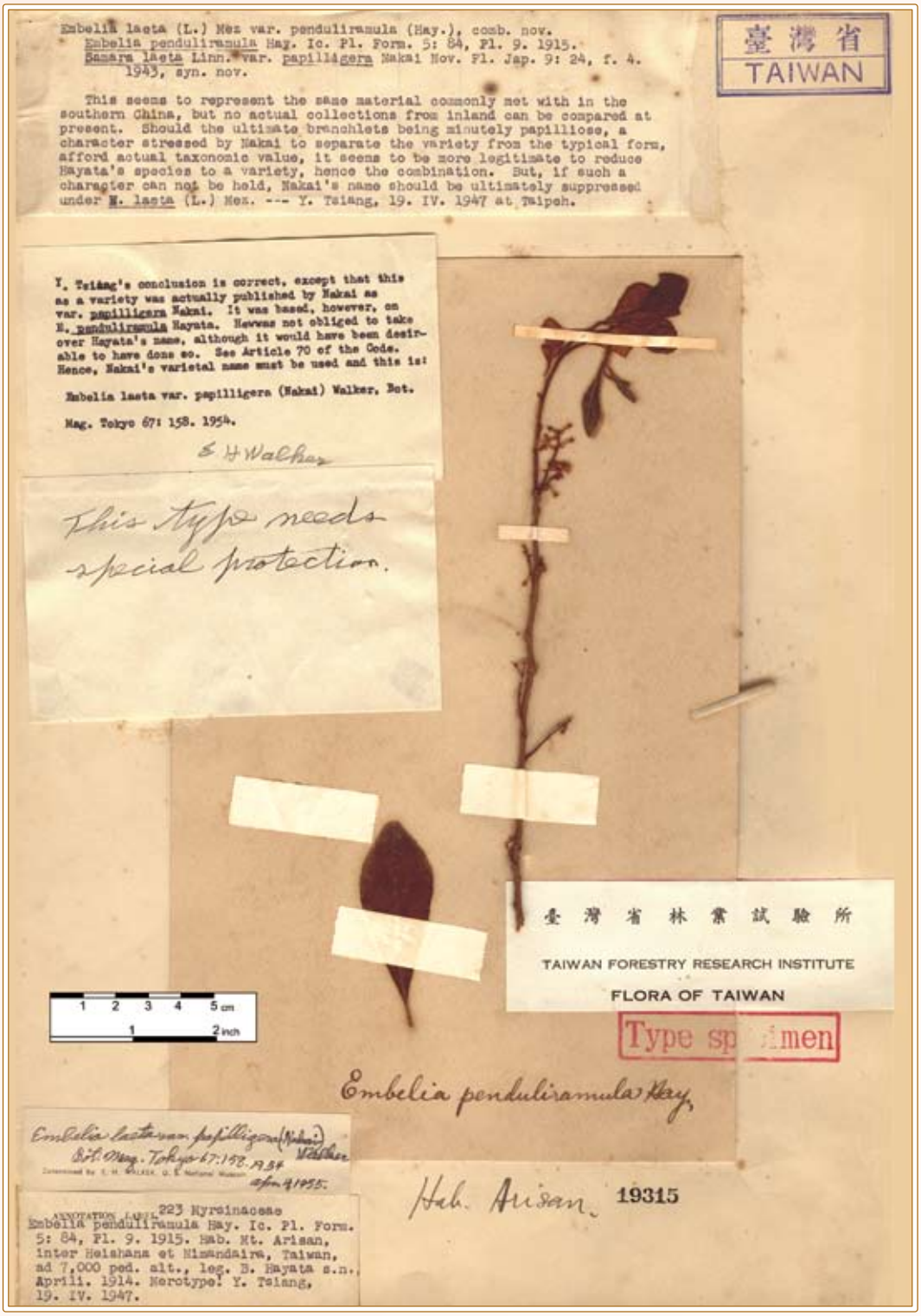
[1)] Sasaki (1930) did not list it as a type, but Y. Tsiang treated it as an isotype on the annotation.

[2)] Mt. Arisan: Funkiko;

[3)] Jan 1912; collector unrecorded (Hayata 1915).



Ardisia suishaensis Hayata, Icon. Pl. Formos. 5:93. 1915. Type (part). Taiwan, Taichun, Suisha. *B. Hayata et S. Sasaki s. n.*, May 1912 (TAIF 19250).



Embelia penduliramula Hayata, Icon. Pl. Formos. 5:84, *t. 9*. 1915. Type (part).[1] Taiwan, Arisan.[2] Collector unrecorded, *s. d.*[3] (TAIF 19315).

[1] Sasaki (1930) listed it as a type.

[2] Mt. Arisan, inter Heishana *et* Nimandaira, ad 7,000 ped. alt.;

[3] Leg. *B. Hayata*, Apr 1914 (Hayata 1915).



Myrsine microphylla Hayata, Icon. Pl. Formos. 3:149. 1913. Syntype.[1)] Taiwan, in Montibus Centralibus. *U. Mori s. n.*, Dec 1909[2)] (TAIF 19376).

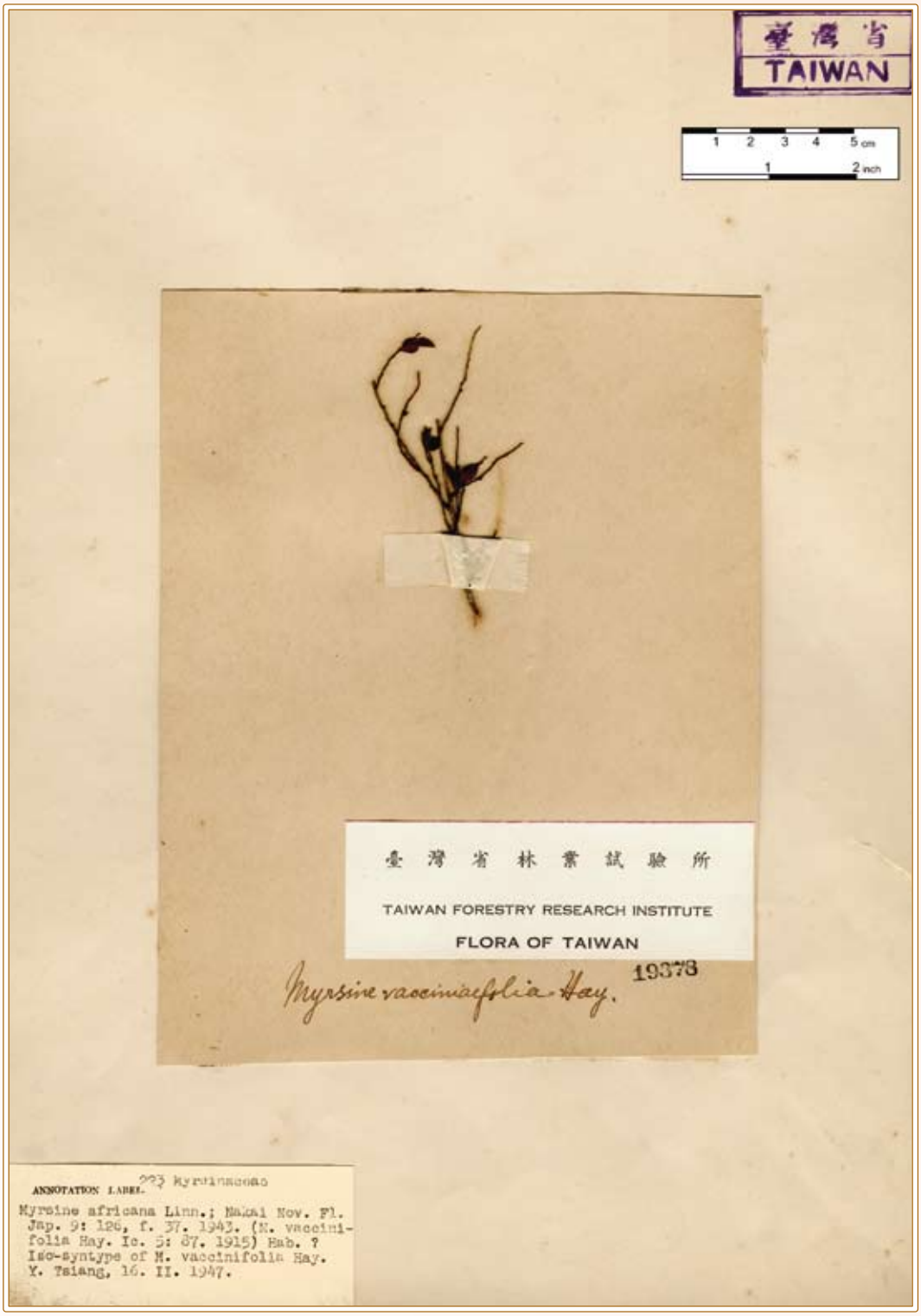
[1)] Sasaki (1930) listed it as a type.

[2)] Dec 1910 (Hayata 1913).



Myrsine microphylla Hayata, Icon. Pl. Formos. 3:149. 1913. Syntype. Taiwan, Taito, Daishizan, ad 6,000 ped. alt. *U. Mori 4579*, 17 Jan 1908[1] (TAIF 19377).

[1] Jan 1908 (Hayata 1913).



Myrsine vacciniifolia Hayata, Icon. Pl. Formos. 5:87. 1915. Type (part).[1)] Taiwan, *s. loco.*[2)] Collector unrecorded, *s. d.*[2)] (TAIF 19378).

[1)] Sasaki (1930) listed it as a type; Y. Tsiang treated it as an iso-syntype on the annotation.

[2)] No collection information cited (Hayata 1915).



Diospyros fengchangensis Lu, Q. J. Chin. For. 18(2):113, *f. 1*. 1985. Isotype. Taiwan, Pingtung, Fengchang.[1)] *S. Y. Lu 12267*, 16 Dec 1982 (TAIF 213711).

[1)] Fengchang, Pingtung, ad 200 m alt. (Lu 1985).



Diospyros fengchangensis Lu, Q. J. Chin. For. 18(2):113, *f. 1*. 1985. Isotype. Taiwan, Pingtung, Fengchang.[1)] *S. Y. Lu 12267*, 16 Dec 1982 (TAIF 213712).

[1)] Fengchang, Pingtung, ad 200 m alt. (Lu 1985).



Diospyros fengchangensis Lu, Q. J. Chin. For. 18(2):113, *f. 1*. 1985. Holotype. Taiwan, Pingtung, Fengchang.[1)] *S. Y. Lu 12267*, 16 Dec 1982 (TAIF 213713).

[1)] Fengchang, Pingtung, ad 200 m alt. (Lu 1985).



Diospyros fengchangensis Lu, Q. J. Chin. For. 18(2):113, *f. 1*. 1985. Isotype. Taiwan, Pingtung, Fengchang.[1)] *S. Y. Lu 12267*, 16 Dec 1982 (TAIF 213714).

[1)] Fengchang, Pingtung, ad 200 m alt. (Lu 1985).



Diospyros fengchangensis Lu, Q. J. Chin. For. 18(2):113, *f. 1*. 1985. Isotype. Taiwan, Pingtung, Fengchang.[1] *S. Y. Lu 12267*, 16 Dec 1982 (TAIF 213715).

[1] Fengchang, Pingtung, ad 200 m alt. (Lu 1985).



Diospyros oldhami Maxim. var. *chartacea* Hayata,[1] J. Coll. Sci. Imp. Univ. Tokyo 30(1):186. 1911. Type.[2] Taiwan, Nanto, Musha. *U. Mori 1181*, 9 Aug 1906[3] (TAIF 19621).

[1] "n. n." instead of "var. nov." in Hayata (1911); however, the original name was not described.

[2] Sasaki (1930) listed it as a type.

[3] Leg. *T. Kawakami et U. Mori*, Aug 1906, (No. 1181) (Hayata 1911).



Diospyros sasakii Hayata, Icon. Pl. Formos. 7:33, *pl. 8*. 1918. Type.[1)] Taiwan, Kwarenko, Taroko, Rausi.[2)] *S. Sasaki s. n.*, 27 Apr 1917[3)] (TAIF 19625).

[1)] Sasaki (1930) listed it as a type.

[2)] inter Batakan *et* Uchitaroko;

[3)] Leg. *S. Sasaki et B. Hayata*, Apr 1917 (Hayata 1918).



Diospyros sasakii Hayata, Icon. Pl. Formos. 7:33, *pl. 8*. 1918. Type.[1)] Taiwan, Kwarenko, Taroko, Rausi.[2)] *S. Sasaki s. n.*, 27 Apr 1917[3)] (TAIF 19626).

[1)] Sasaki (1930) listed it as a type.

[2)] inter Batakan *et* Uchitaroko;

[3)] Leg. *S. Sasaki et B. Hayata*, Apr 1917 (Hayata 1918).



Diospyros sasakii Hayata, Icon. Pl. Formos. 7:33, *pl. 8*. 1918. Type. Taiwan, inter Batakan *et* Uchitaroko. *S. Sasaki s. n.*, 27 Apr 1917[1)] (TAIF 28510).

[1)] Leg. *S. Sasaki et B. Hayata*, Apr 1917 (Hayata 1918).



Diospyros sasakii Hayata, Icon. Pl. Formos. 7:33, *pl. 8*. 1918. Type. Taiwan, inter Batakan *et* Uchitaroko. *S. Sasaki s. n.*, 27 Apr 1917 [1)] (TAIF 28511).

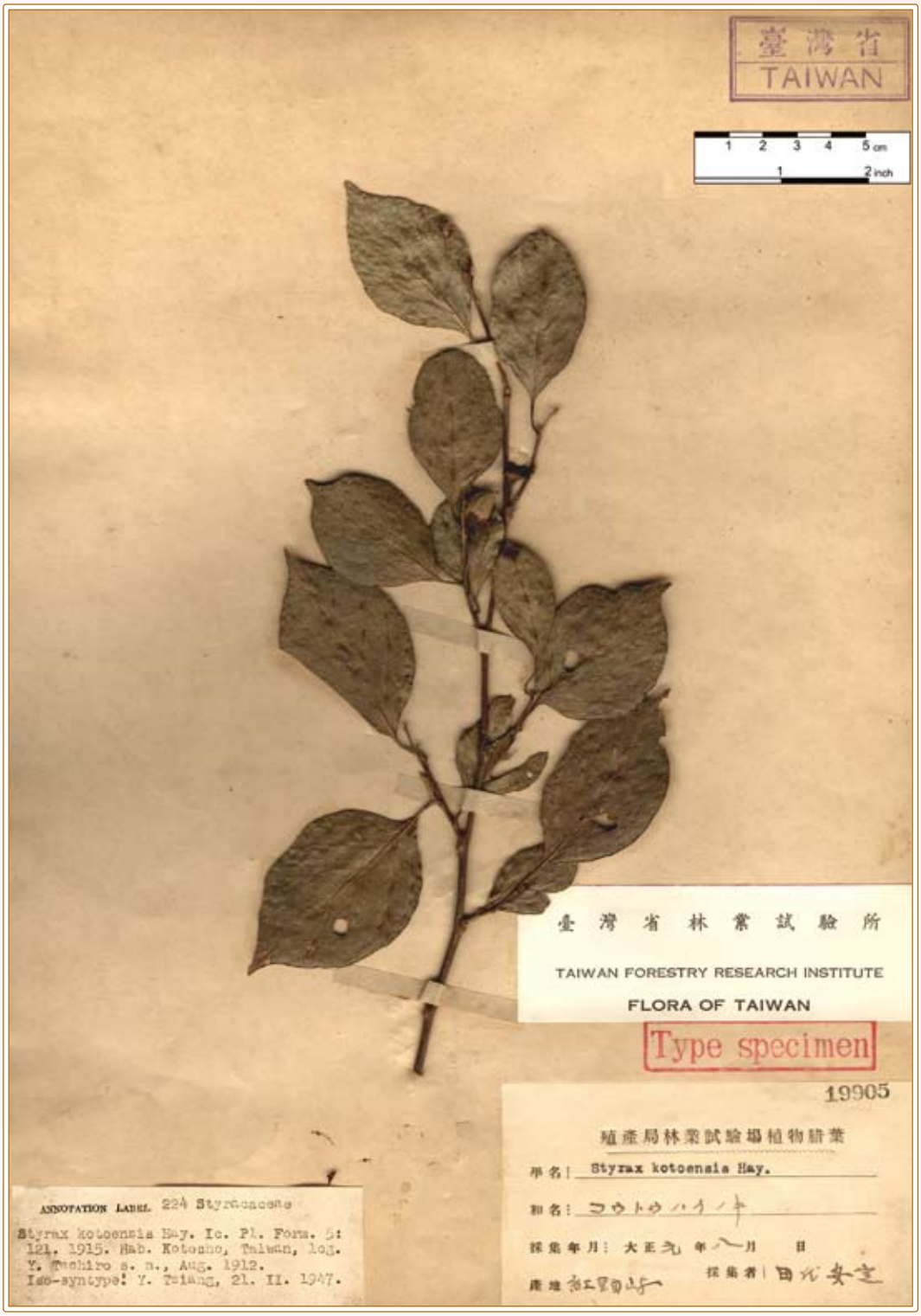
[1)] Leg. *S. Sasaki et B. Hayata*, Apr 1917 (Hayata 1918).



Styrax kotoensis Hayata, Icon. Pl. Formos. 5:121. 1915. Type.[1)] Taiwan, Taito, Kotosho. *T. Kawakami et S. Sasaki 44*,[2)] July 1912 (TAIF 19904).

[1)] Sasaki (1930) listed it as a type.

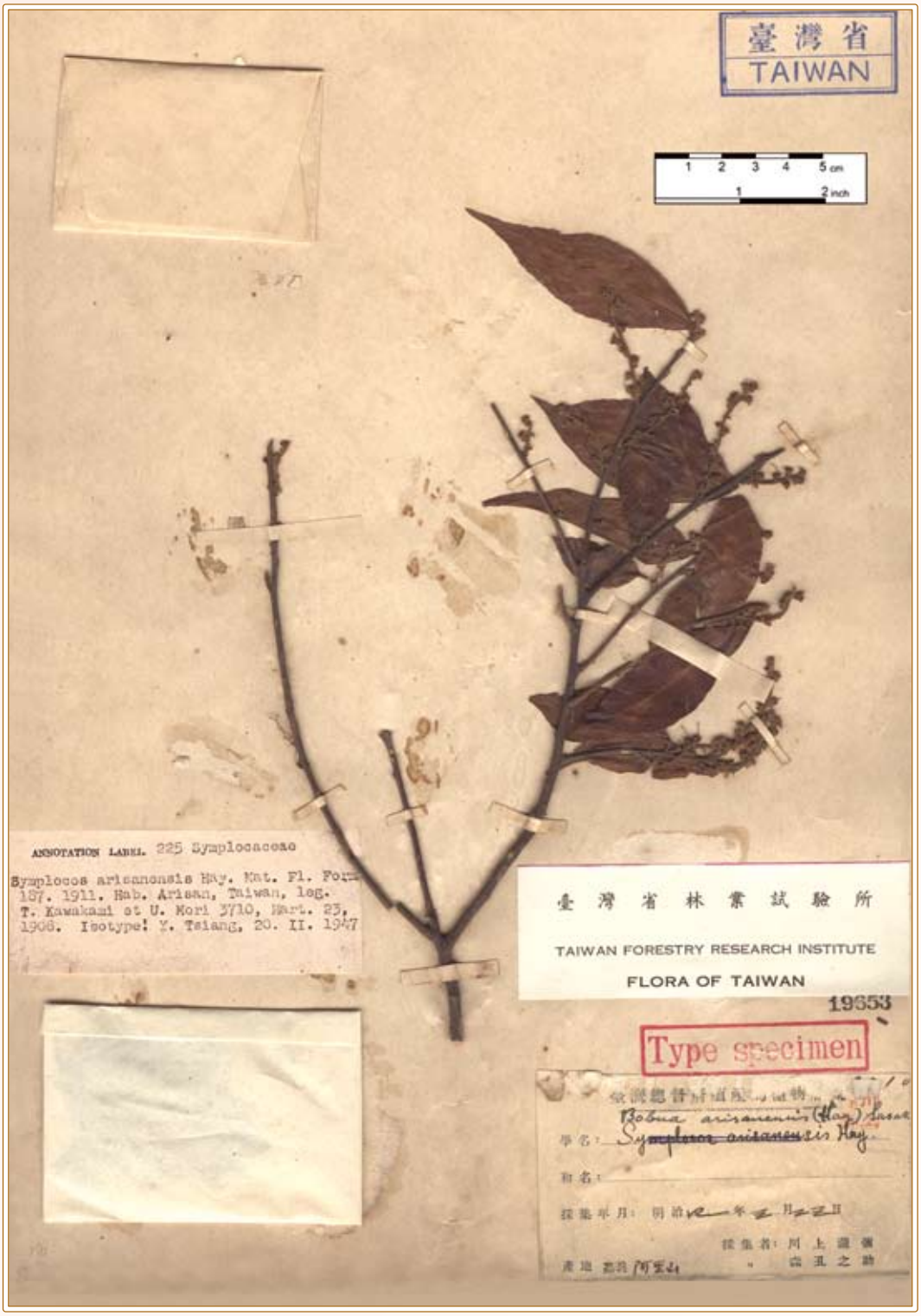
[2)] Leg. *Y. Tashiro, T. Kawakami et S. Sasaki* (Hayata 1915).



Styrax kotoensis Hayata, Icon. Pl. Formos. 5:121. 1915. Type.[1)] Taiwan, Kotosho. *Y. Tashiro s. n.*, Aug 1912[2)] (TAIF 19905).

[1)] Sasaki (1930) listed it as a type.

[2)] Leg. *Y. Tashiro, T. Kawakami et S. Sasaki*, July 1912 (Hayata 1915).



Symplocos arisanensis Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):187. 1911. Type. Taiwan, Kagi, Arizan. *T. Kawakami et U. Mori 3710*, 23 Mar 1908 [1] (TAIF 19653).

[1] Mar 1908 (Hayata 1911).



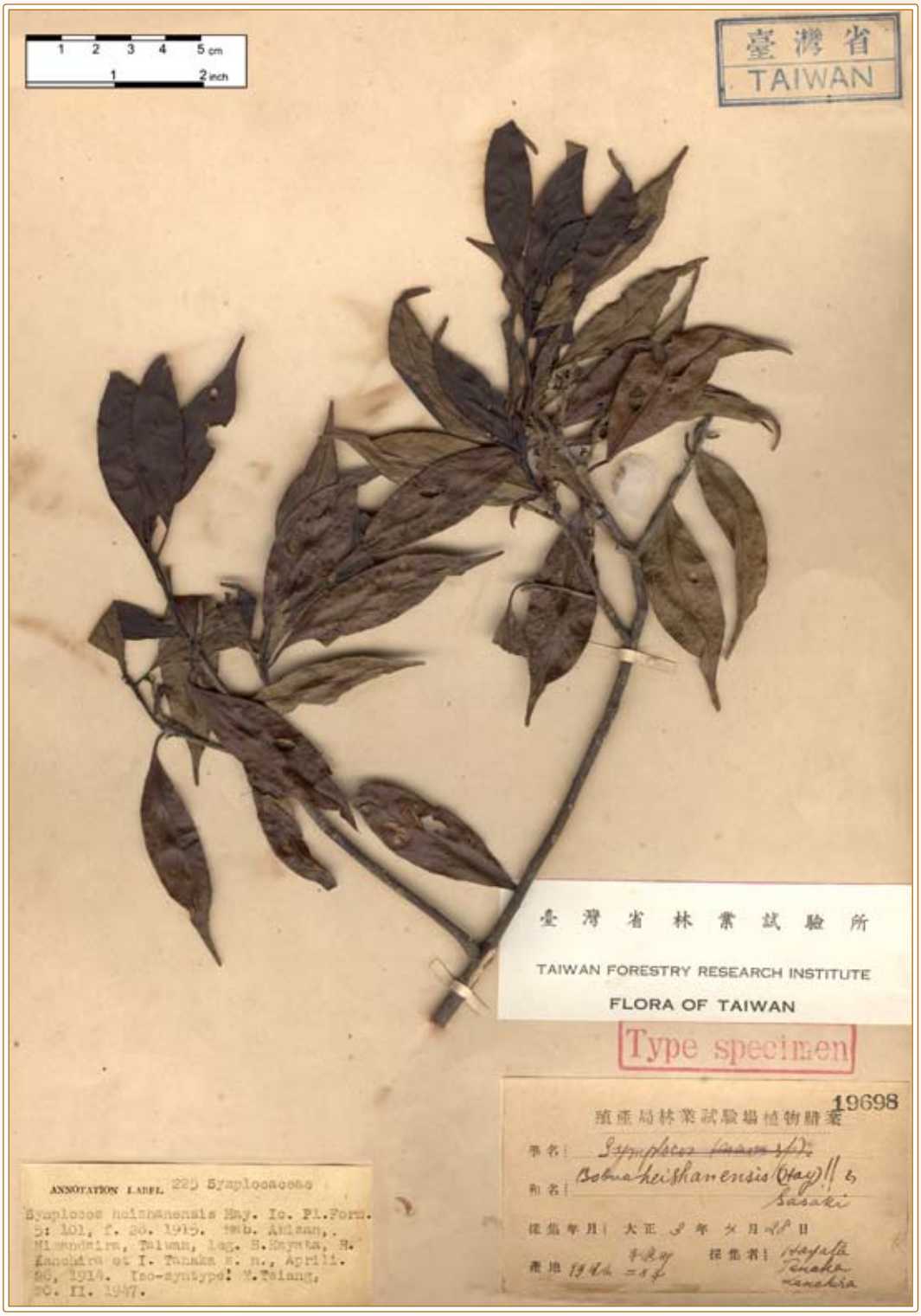
Symplocos divaricativena Hayata, Icon. Pl. Formos. 5:96, *f. 25-g*. 1915. Type. Taiwan, Mt. Morrison, ad 7,500 ped. alt. *T. Kawakami et U. Mori 1729*, 13 Oct 1906 [1] (TAIF 19672).

[1] Leg. *U. Mori* (No. 1729), Oct 1906 (Hayata 1915).



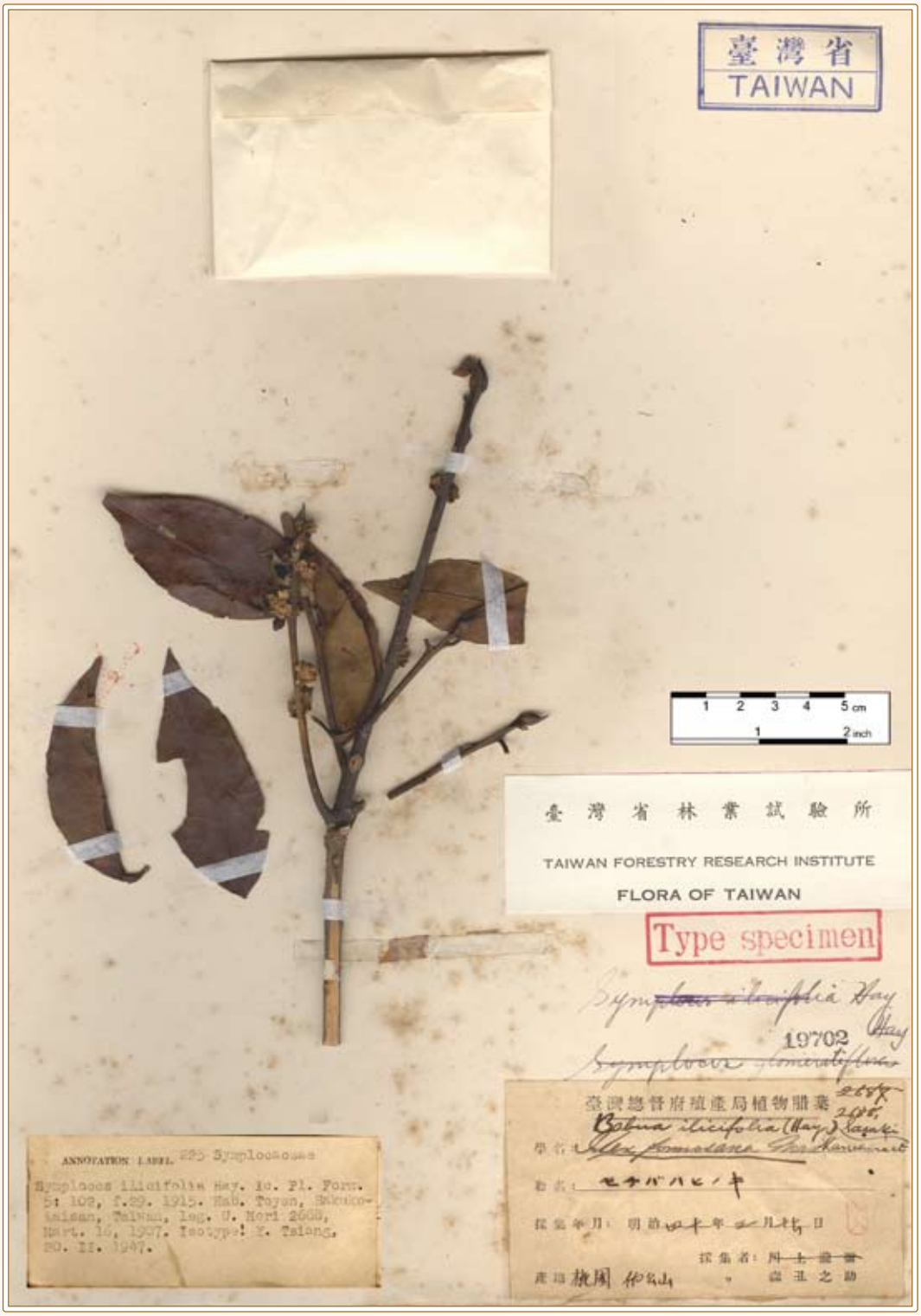
Symplocos divaricativena Hayata, Icon. Pl. Formos. 5:96, *f. 25-g*. 1915. Type. Taiwan, Mt. Morrison, ad 7,500 ped. alt. *T. Kawakami et U. Mori 1729*, 13 Oct 1906[1)] (TAIF 19673).

[1)] Leg. *U. Mori* (No. 1729), Oct 1906 (Hayata 1915).



Symplocos heishanensis Hayata, Icon. Pl. Formos. 5:101, *f. 28*. 1915. Syntype. Taiwan, Arisan, inter Nimandaira *et* Heishana. *B. Hayata, I. Tanaka et R. Kanehira s. n.*, 28 Apr 1914[1)] (TAIF 19698).

[1)] Leg. *T. Ito et B. Hayata*, Apr 1914 (Hayata 1915).



Symplocos ilicifolia Hayata, Icon. Pl. Formos. 5:102, *f. 29*. 1915. Type. Taiwan, Toyen, Mt. Hakukozan.[1)] *U. Mori 2688*, 16 Mar 1907[2)] (TAIF 19702).

[1)] Toyen: Hakukotaizan;

[2)] Mar 1907 (Hayata 1915).



Symplocos japonica A. DC. var. *nakaharai* Hayata, Icon. Pl. Formos. 5:103. 1915. Type.[1] Japan, Kanechiyama.[2] *T. Kawakami et G. Nakahara 35*,[3] Apr 1907 (TAIF 19708).

[1] Sasaki (1930) listed it as a type.

[2] Loo-choo: Nagotake;

[3] Leg. *G. Nakahara* (Hayata 1915).

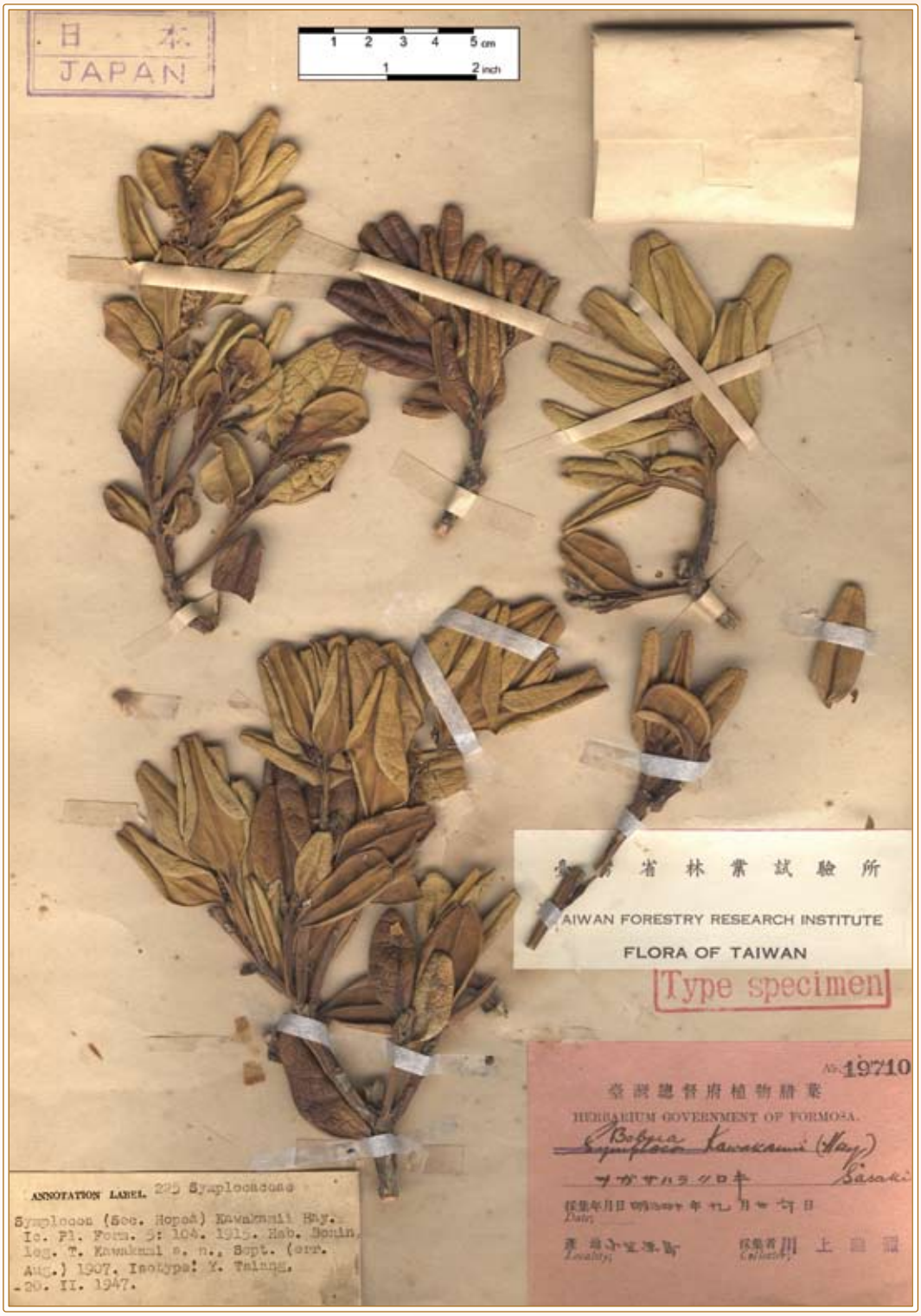


Symplocos japonica A. DC. var. *nakaharai* Hayata, Icon. Pl. Formos. 5:103. 1915. Type.[1)] Japan, Okinawa, Nagoyama.[2)] *T. Kawakami et G. Nakahara 46*,[3)] Apr 1907 (TAIF 19709).

[1)] Sasaki (1930) listed it as a type.

[2)] Loo-choo: Nagotake;

[3)] Leg. *G. Nakahara* (Hayata 1915).



Symplocos kawakamii Hayata, Icon. Pl. Formos. 5:104, *f. 30*. 1915. Type.[1)] Japan, Bonin. *T. Kawakami s. n.*, 26 Sept 1907[2)] (TAIF 19710).

[1)] Sasaki (1930) listed it as a type.

[2)] Aug (Hayata 1915).



Symplocos kawakamii Hayata, Icon. Pl. Formos. 5:104, *f. 30*. 1915. Type.[1)] Japan, Isl. Ogasawara.[2)] *T. Kawakami s. n.*, 26 Sept 1907[3)] (TAIF 19711).

[1)] Sasaki (1930) listed it as a type.

[2)] Bonin cited by Hayata (1915) is the same as Ogasawara.

[3)] Aug (Hayata 1915).



Symplocos kawakamii Hayata, Icon. Pl. Formos. 5:104, *f. 30*. 1915. Type.[1)] Japan, Bonin. *T. Kawakami s. n.*, 26 Sept 1907[2)] (TAIF 19712).

[1)] Sasaki (1930) listed it as a type.

[2)] Aug (Hayata 1915).



Symplocos koshunensis Kanehira, Trans. Nat. Hist. Soc. Formos. 20:382. 1930. Syntype. Taiwan, Taito, Shussuiha. *S. Sasaki s. n.*, Feb 1925 (TAIF 22386).



Symplocos koshunensis Kanehira, Trans. Nat. Hist. Soc. Formos. 20:382. 1930. Syntype. Taiwan, Taito, Shussuiha. *S. Sasaki s. n.*, 15 Feb 1925 [1)] (TAIF 22387).

[1)] Feb 1925 (Kanehira 1930).



Symplocos koshunensis Kanehira, Trans. Nat. Hist. Soc. Formos. 20:382. 1930. Syntype. Taiwan, Taito, Shussuiha. *S. Sasaki s. n.*, Feb 1925 (TAIF 22388).



Symplocos koshunensis Kanehira, Trans. Nat. Hist. Soc. Formos. 20:382. 1930. Syntype. Taiwan, Taito, Shussuiha. *S. Sasaki s. n.*, Feb 1925 (TAIF 22389 a[1)]).

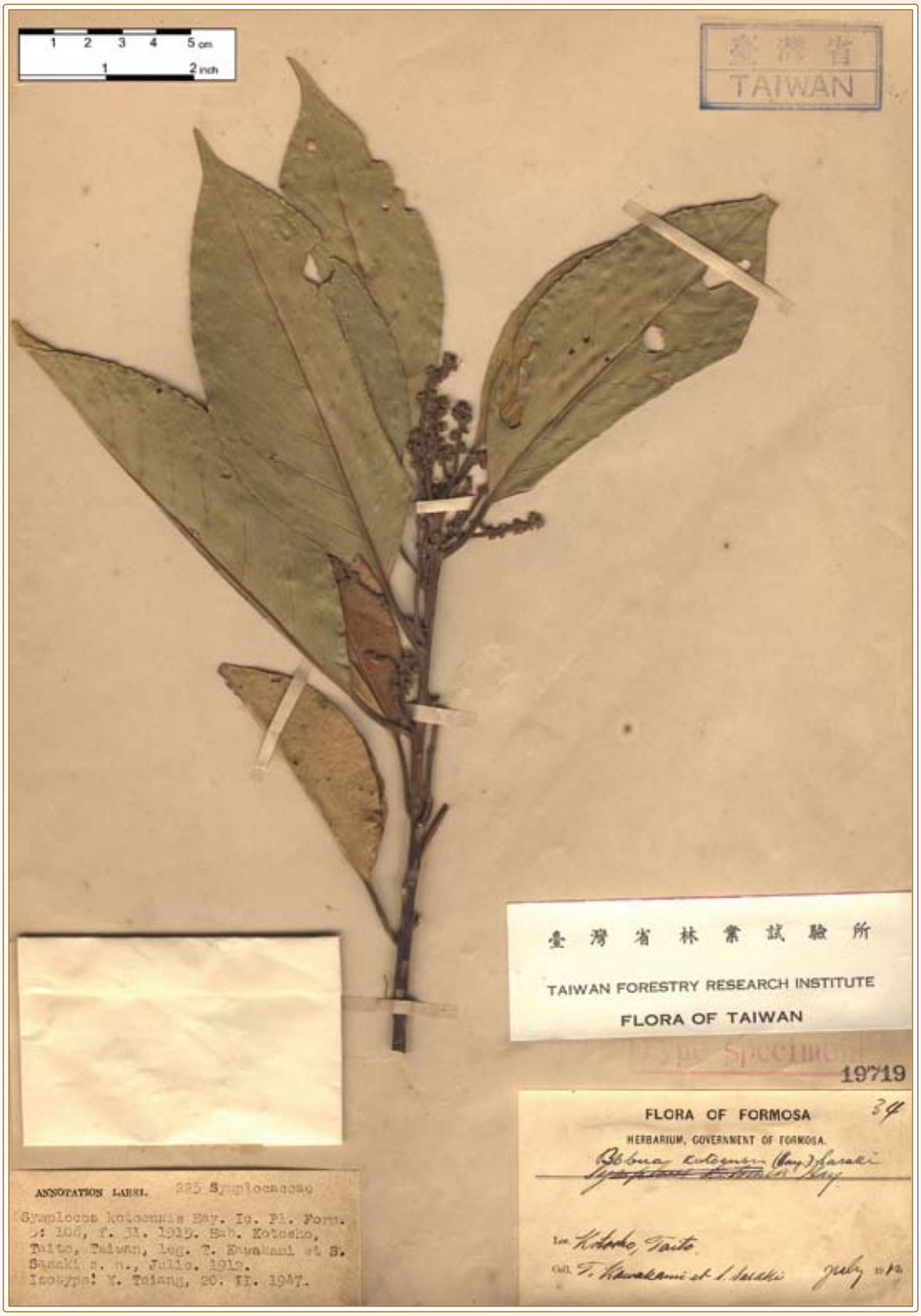
[1)] "a" was added to distinguish this from another duplicate.



Symplocos koshunensis Kanehira, Trans. Nat. Hist. Soc. Formos. 20:382. 1930. Type. Taiwan, Taito, Shussuiha. *S. Sasaki s. n.*, 15 Feb 1925 [1] (TAIF 22389 b [2]).

[1] Feb 1925 (Kanehira 1930).

[2] "b" was added to distinguish this from another duplicate.

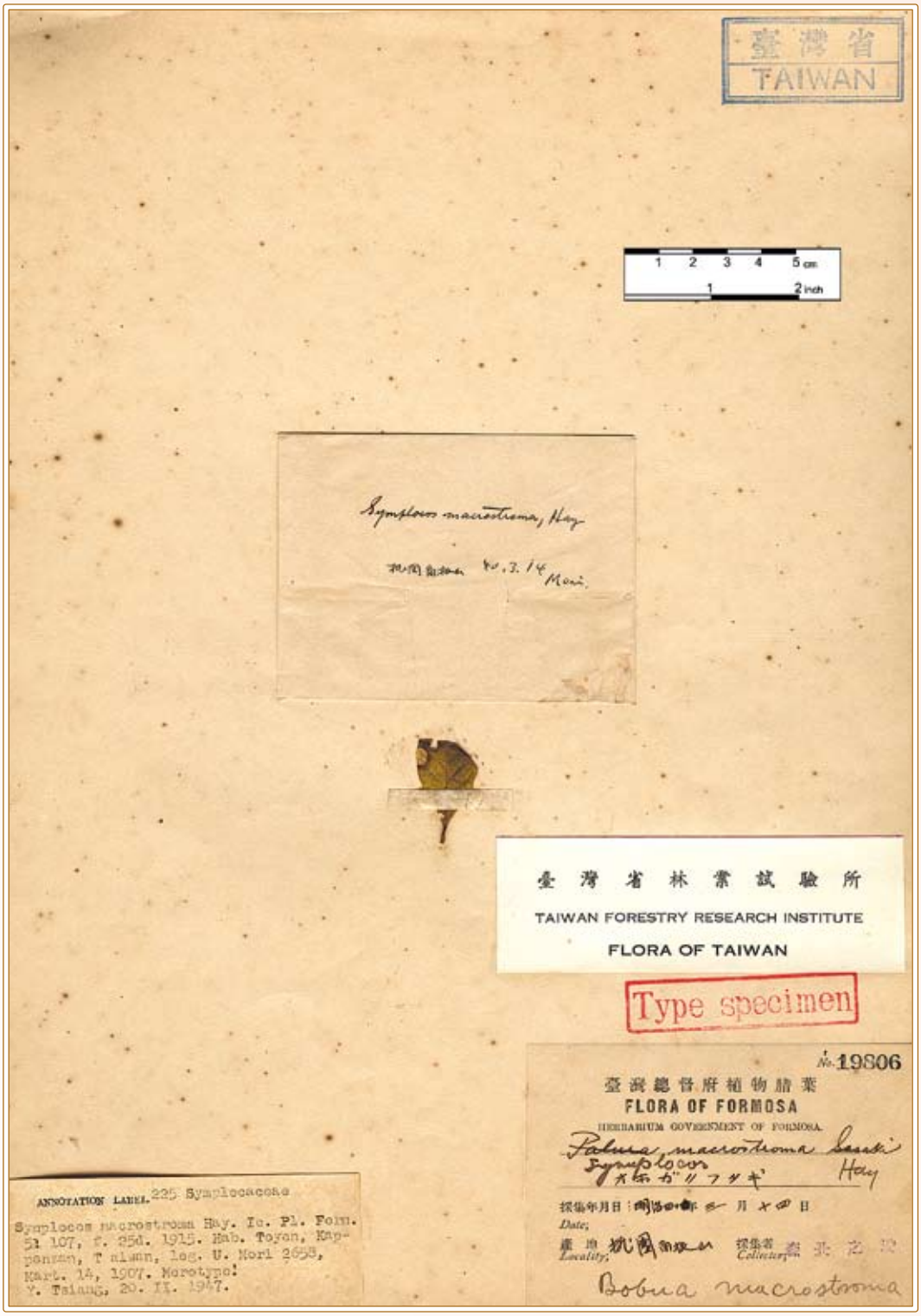


Symplocos kotoensis Hayata, Icon. Pl. Formos. 5:106, *f. 31*. 1915. Type. Taiwan, Taito, Kotosho. *T. Kawakami et S. Sasaki 34*,[1)] July 1912 (TAIF 19719).

[1)] Leg. *T. Kawakami et S. Sasaki* (Hayata 1915).



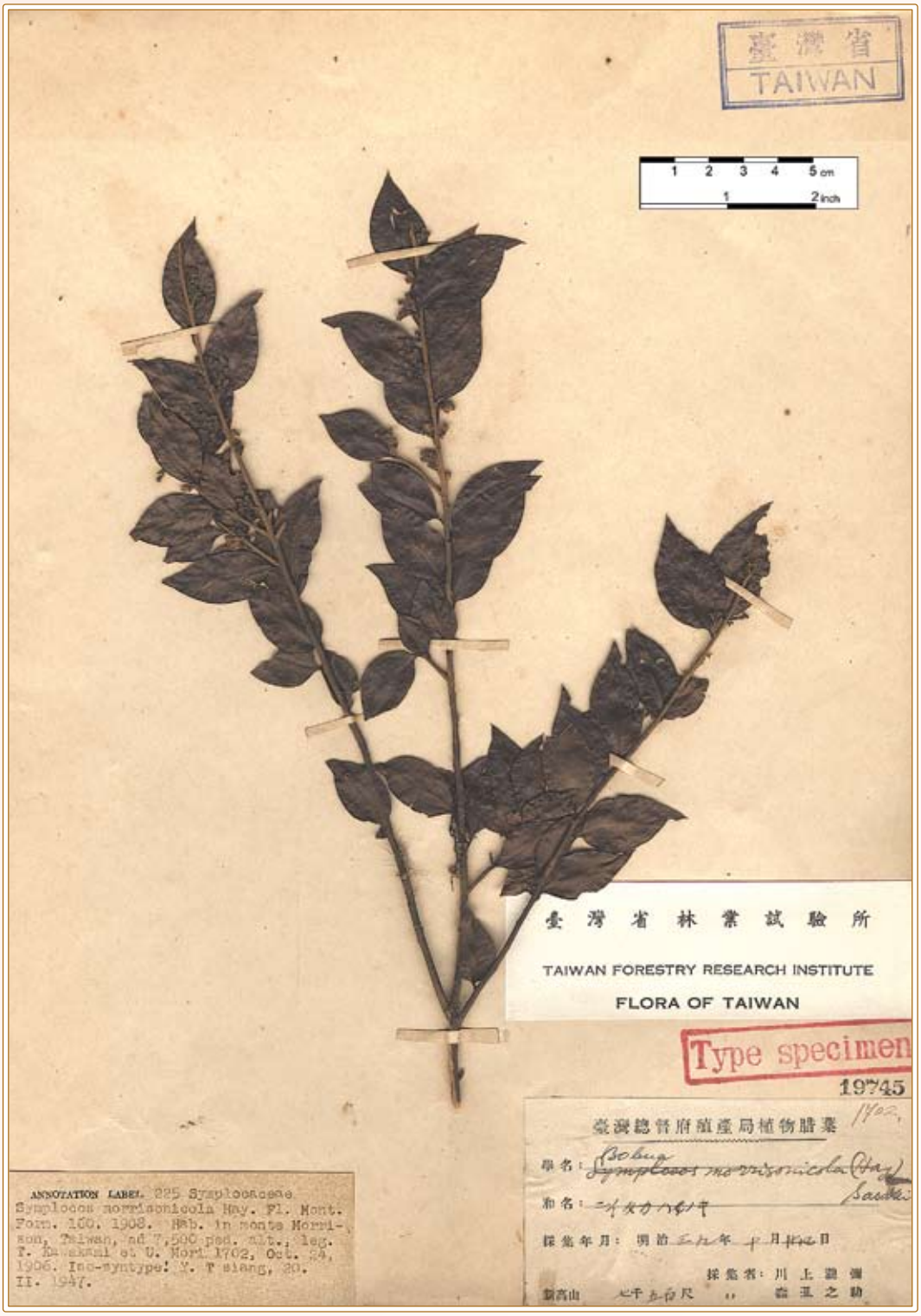
Symplocos kotoensis Hayata, Icon. Pl. Formos. 5:106, *f. 31*. 1915. Type. Taiwan, Kotosho. *T. Kawakami et S. Sasaki s. n.*, July 1912 (TAIF 19720).



Symplocos macrostroma Hayata, Icon. Pl. Formos. 5:107, *f. 25-d.* 1915. Type (part).[1] Taiwan, Toyen, Kappanzan. *U. Mori s. n.*, 14 Mar 1907[2] (TAIF 19806).

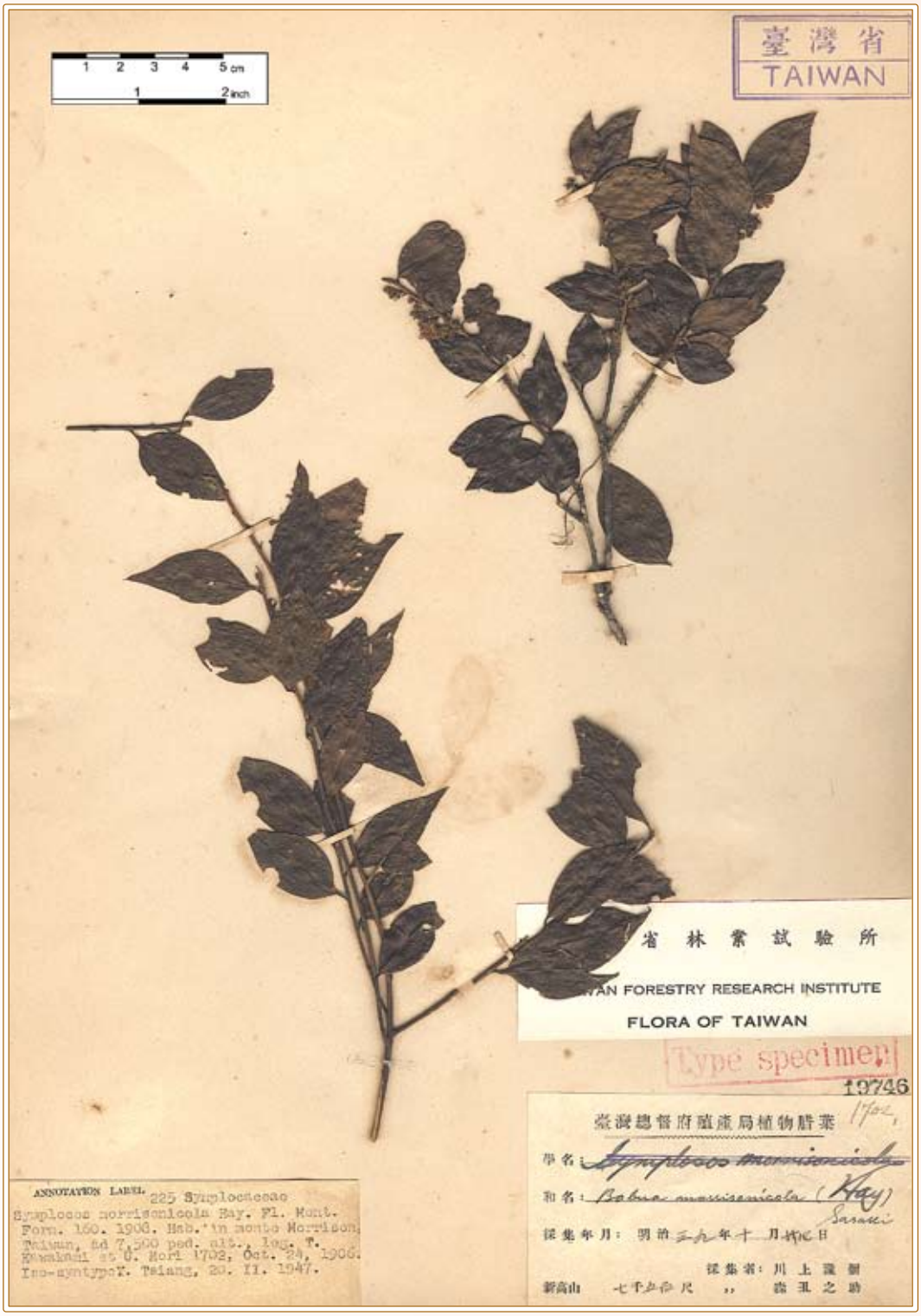
[1] Sasaki (1930) listed it as a type.

[2] Leg. *U. Mori*, Mar 1907, (No. 2658) (Hayata 1915).



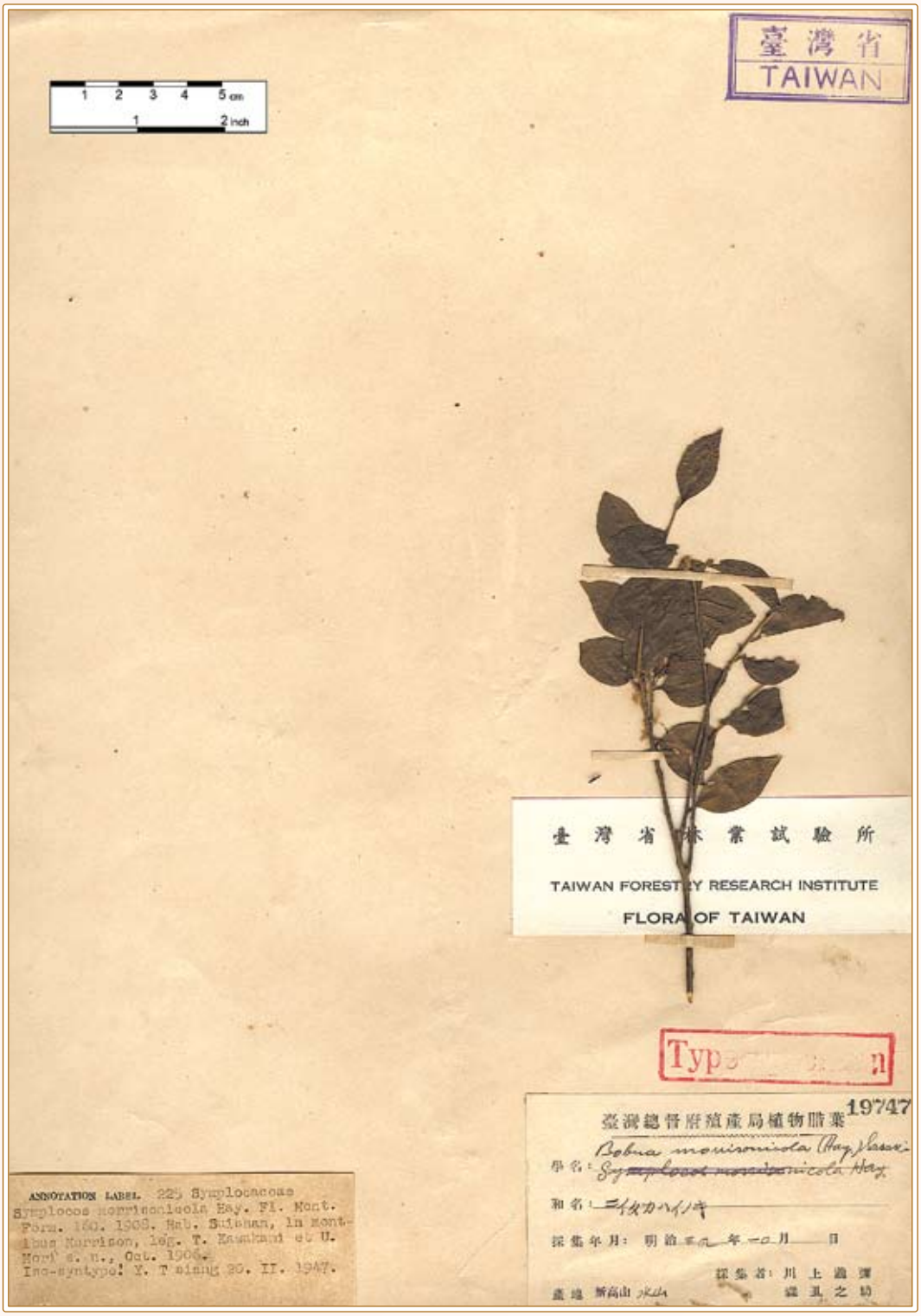
Symplocos morrisonicola Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):160, *pl. 27*. 1908. Syntype. Taiwan, in monte Morrison, ad 7,500 ped. alt. *T. Kawakami et U. Mori 1702*, 24 Oct 1906[1)] (TAIF 19745).

[1)] Oct 1906 (Hayata 1908).



Symplocos morrisonicola Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):160, *pl. 27.* 1908. Syntype. Taiwan, in monte Morrison, ad 7,500 ped. alt. *T. Kawakami et U. Mori 1702*, 24 Oct 1906[1)] (TAIF 19746).

[1)] Oct 1906 (Hayata 1908).

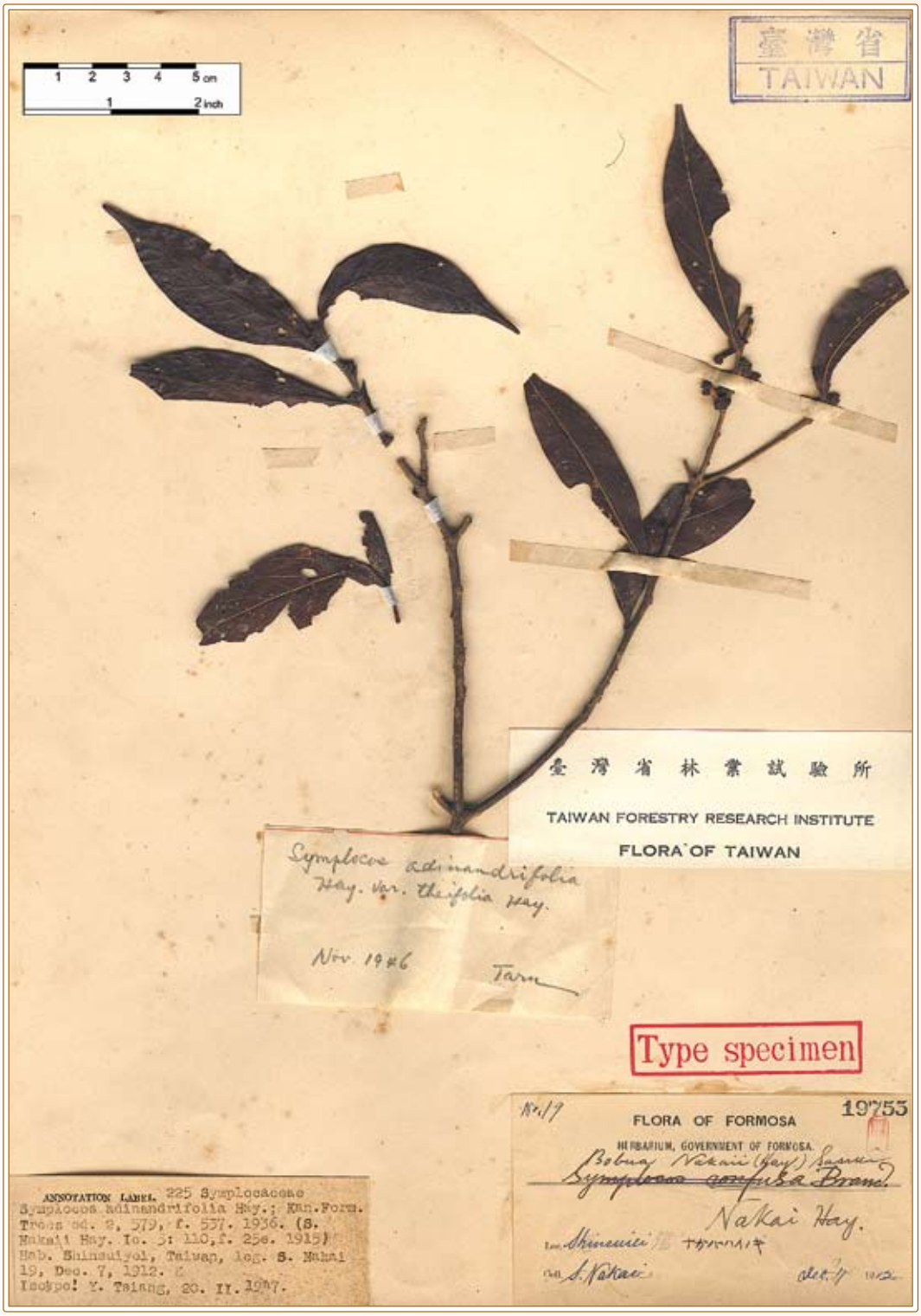


Symplocos morrisonicola Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):160, *pl. 27*. 1908. Syntype.[1)] Taiwan, in monte Morrison, Suizan.[2)] *T. Kawakami et U. Mori s. n.*, Oct 1906[3)] (TAIF 19747).

[1)] Sasaki (1930) listed it as a type.

[2)] Suizan, in montibus Morrison, ad 7,702 ped. alt.;

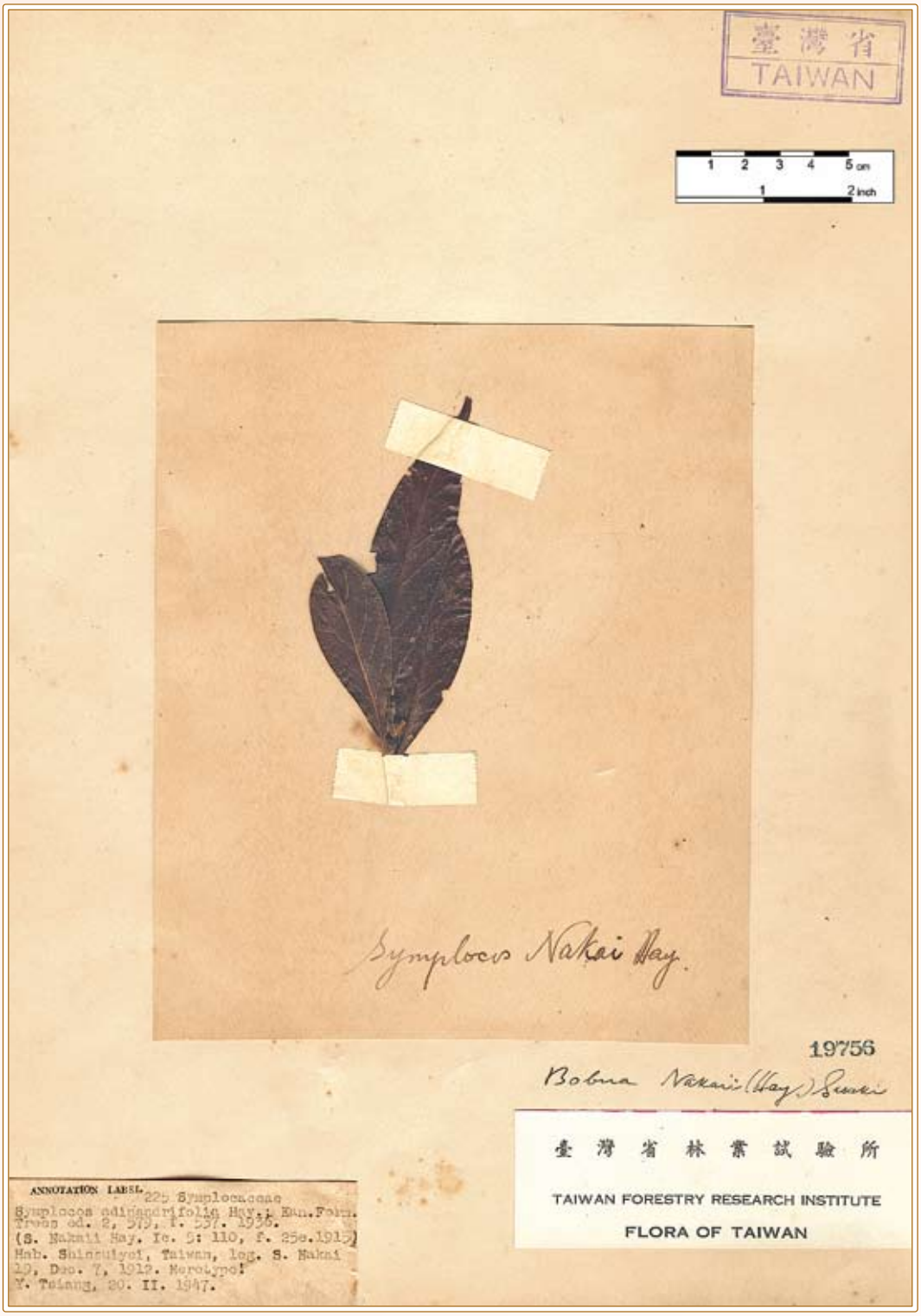
[3)] Leg. *S. Nagasawa*, Oct 1905, (No. 737) (Hayata 1908).



Symplocos nakaii Hayata, Icon. Pl. Formos. 5:110, *f. 25-e.* 1915. Type. Taiwan, Shinsuiei.[1] *S. Nakai 19*, 7 Dec 1912[2] (TAIF 19755).

[1] Shinsuiyei cited by Hayata (1915) is the same as Shinsuiei.

[2] Dec 1912 (Hayata 1915).



Symplocos nakaii Hayata, Icon. Pl. Formos. 5:110, *f. 25-e.* 1915. Type (part).[1)] *s. loco.*[2)] Collector unrecorded, s. *d.*[3)] (TAIF 19756).

[1)] Sasaki (1930) listed it as a type.

[2)] Shinsuiyei;

[3)] Leg. *S. Nakai,* Dec 1912 (No. 19) (Hayata 1915).



Symplocos somai Hayata, Icon. Pl. Formos. 9:69. 1920. Syntype.[1)] Taiwan, Shintiku, Jokirin. *T. Soma s. n.*, Dec 1915[2)] (TAIF 19769).

[1)] Sasaki (1930) listed it as a type.

[2)] Leg. *S. Sasaki*, Mar 1916 (Hayata 1920).



Symplocos somai Hayata, Icon. Pl. Formos. 9:69. 1920. Syntype. Taiwan, Shintiku, Jokirin. *S. Sasaki 26*,[1)] Mar 1916 (TAIF 19770).

[1)] Leg. *S. Sasaki* (Hayata 1920).



Symplocos sozanensis Hayata, Icon. Pl. Formos. 9:70. 1920. Type.[1)] Taiwan, Sozan. *Y. Shimada s. n.*, 3 Apr 1918[2)] (TAIF 19773).

[1)] Sasaki (1930) listed it as a type.

[2)] July 1918 (Hayata 1920).



Symplocos sozanensis Hayata, Icon. Pl. Formos. 9:70. 1920. Type.[1)] Taiwan, Sozan. *Y. Shimada s. n.*, 3 Apr 1918[2)] (TAIF 19774).

[1)] Sasaki (1930) listed it as a type.

[2)] July 1918 (Hayata 1920).



Symplocos suishariensis Hayata, Icon. Pl. Formos. 5:116, *f. 39.* 1915. Type. Taiwan, Arisan, inter Suisharyo *et* Funkiko.[1] *B. Hayata, R. Kanehira et I. Tanaka s. n.*, 24 Apr 1914[2] (TAIF 19783).

[1] Arisan, inter Suisharyo *et* Funkiko, ad 4,000 ped. alt.;

[2] Apr 1914 (Hayata 1915).



Symplocos trichoclada Hayata, Icon. Pl. Formos. 5:118, *f. 25-f.* 1915. Type (part).[1)] Taiwan, in montibus centralibus, Ahi-sen.[2)] *T. Kawakami et S. Sasaki s. n.*, 3 Jan 1911[3)] (TAIF 19801).

[1)] Sasaki (1930) listed it as a type.

[2)] In montibus centralibus, ad 5,000 ped. alt.;

[3)] Leg. *S. Sasaki*, Jan 1907, (No. 1) (Hayata 1915).



Chionanthus serrulatus Hayata, Icon. Pl. Formos. 3:150, *t. 28.* 1913. Type. Taiwan, Toyencho, Kappanzan. *U. Mori et Y. Shimada s. n.*, 25 Mar 1910[1)] (TAIF 19916).

[1)] Mar 1910 (Hayata 1913).



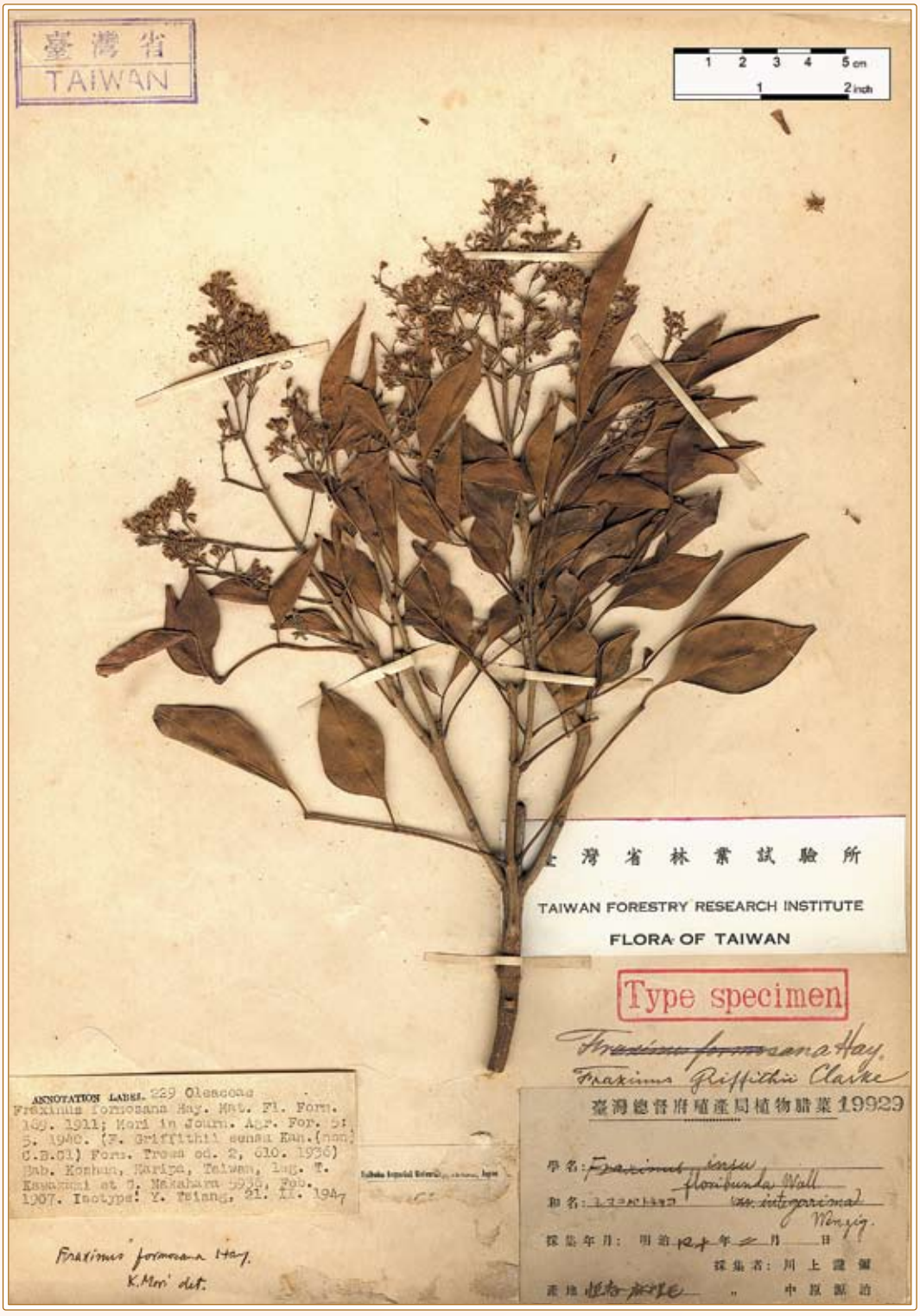
Chionanthus serrulatus Hayata, Icon. Pl. Formos. 3:150, *t. 28.* 1913. Type. Taiwan, Toyen, Kappanzan. *U. Mori et Y. Shimada s. n.*, Mar 1910 (TAIF 19917).



Fraxinus formosana Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):189. 1911. Type.[1)] Taiwan, Koshun, Maripa. *T. Kawakami et G. Nakahara 5936*,[2)] Feb 1907 (TAIF 19928).

[1)] Sasaki (1930) listed it as a type.

[2)] Leg. *G. Nakahara* (Hayata 1911).



Fraxinus formosana Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):189. 1911. Type.[1] Taiwan, Koshun, Maripa. *T. Kawakami et G. Nakahara s. n.*,[2] Feb 1907 (TAIF 19929).

[1] Sasaki (1930) listed it as a type.

[2] Leg. *G. Nakahara* (Hayata 1911).



Jasminum shimadai Hayata, Icon. Pl. Formos. 9:70, *pl. 5, f. 26.* 1920. Type.[1] Taiwan, Gaogan. *Y. Shimada s. n.*, 18 June 1918[2] (TAIF 19966).

[1] Sasaki (1930) listed it as a type.

[2] Leg. *S. Shimada*, July 1918 (Hayata 1920).



Jasminum shimadai Hayata, Icon. Pl. Formos. 9:70, *pl. 5, f. 26.* 1920. Type.[1)] Taiwan, Gaogan. *Y. Shimada s. n.*, 18 June 1918[2)] (TAIF 19967).

[1)] Sasaki (1930) listed it as a type.

[2)] Leg. *S. Shimada*, July 1918 (Hayata 1920).



Jasminum shimadai Hayata, Icon. Pl. Formos. 9:70, *pl. 5, f. 26.* 1920. Type (part).[1)] Taiwan, Toyen, Gaogan. *Y. Shimada s. n.*, 18 June 1918[2)] (TAIF 19968).

[1)] Sasaki (1930) listed it as a type.

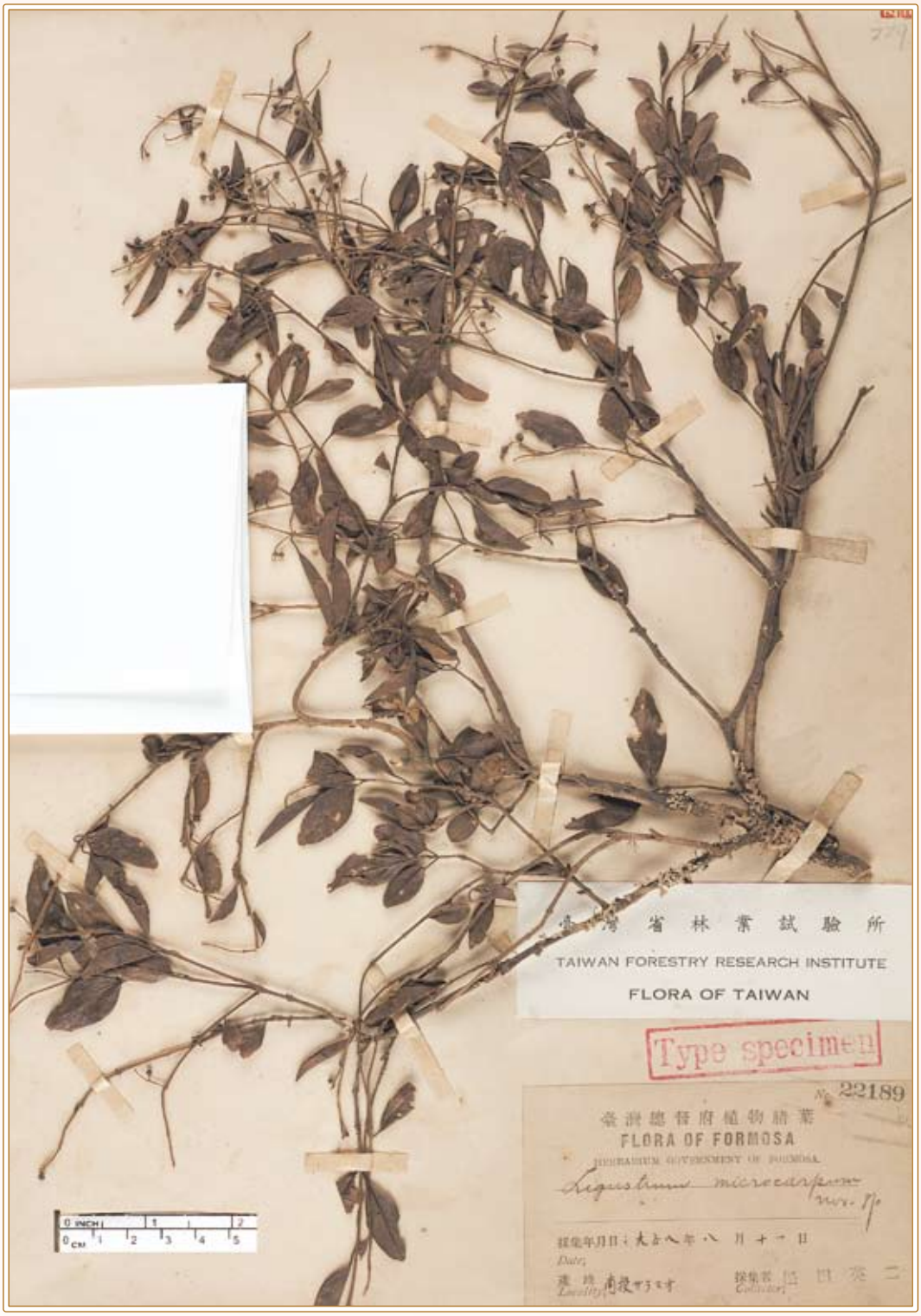
[2)] Leg. *S. Shimada*, July 1918 (Hayata 1920).



Ligustrum microcarpum Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:146. 1931. Syntype. Taiwan, Nanto, Saramao. *E. Matsuda s. n.*, 11 Aug 1919[1)] (TAIF 22189 a[2)]).

[1)] Aug 1919 (Kanehira 1931).

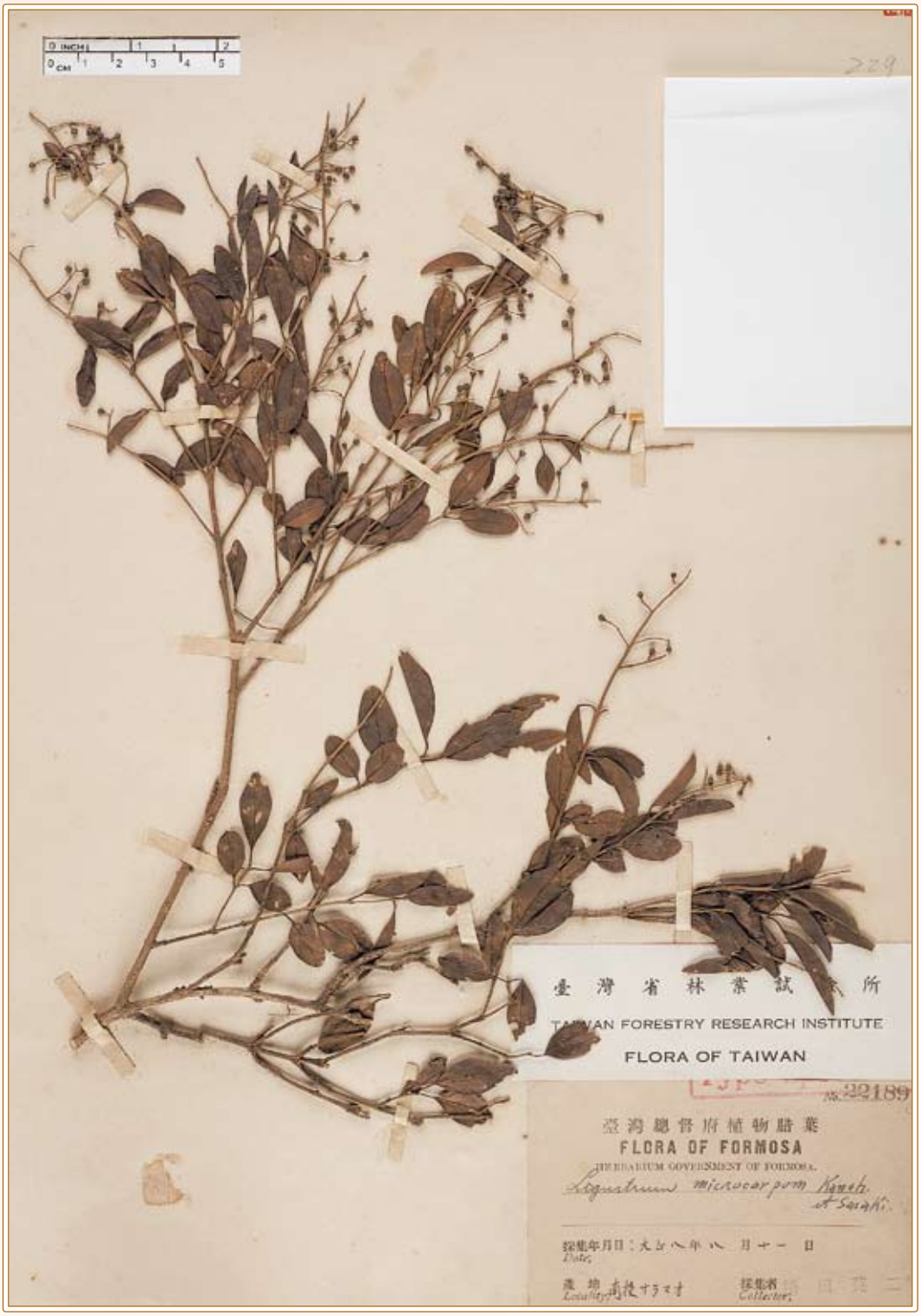
[2)] "a" was added to distinguish this from other duplicates.



Ligustrum microcarpum Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:146. 1931. Syntype. Taiwan, Nanto, Saramao. *E. Matsuda s. n.*, 11 Aug 1919[1)] (TAIF 22189 b[2)]).

[1)] Aug 1919 (Kanehira 1931).

[2)] "b" was added to distinguish this from other duplicates.



Ligustrum microcarpum Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:146. 1931. Syntype. Taiwan, Nanto, Saramao. *E. Matsuda s. n.*, 11 Aug 1919[1)] (TAIF 22189 c[2)]).

[1)] Aug 1919 (Kanehira 1931).

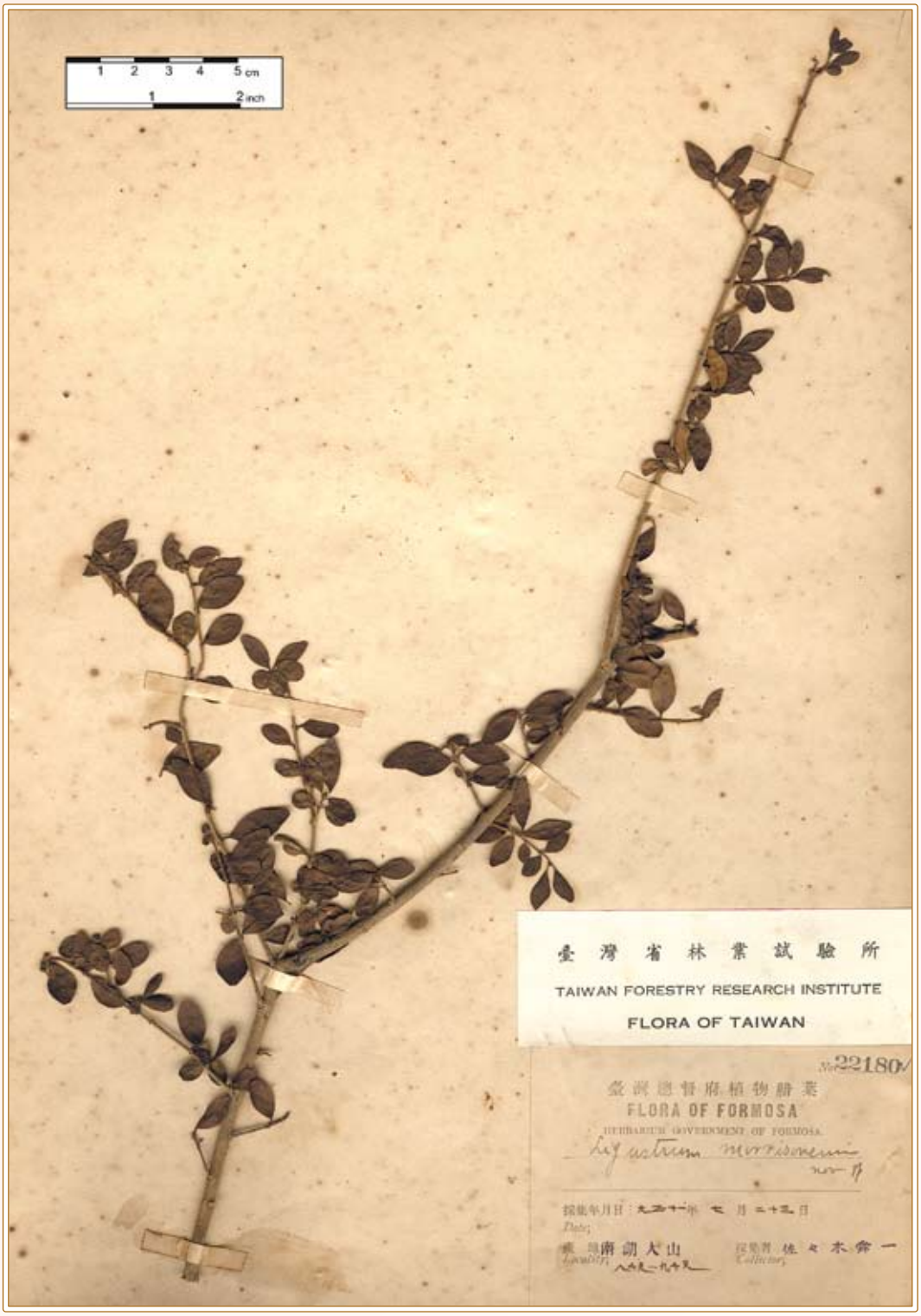
[2)] "c" was added to distinguish this from other duplicates.



Ligustrum microcarpum Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:146. 1931. Syntype. Taiwan, Nanto, Saramao. *E. Matsuda s. n.*, 11 Aug 1919[1] (TAIF 22189 d[2]).

[1] Aug 1919 (Kanehira 1931).

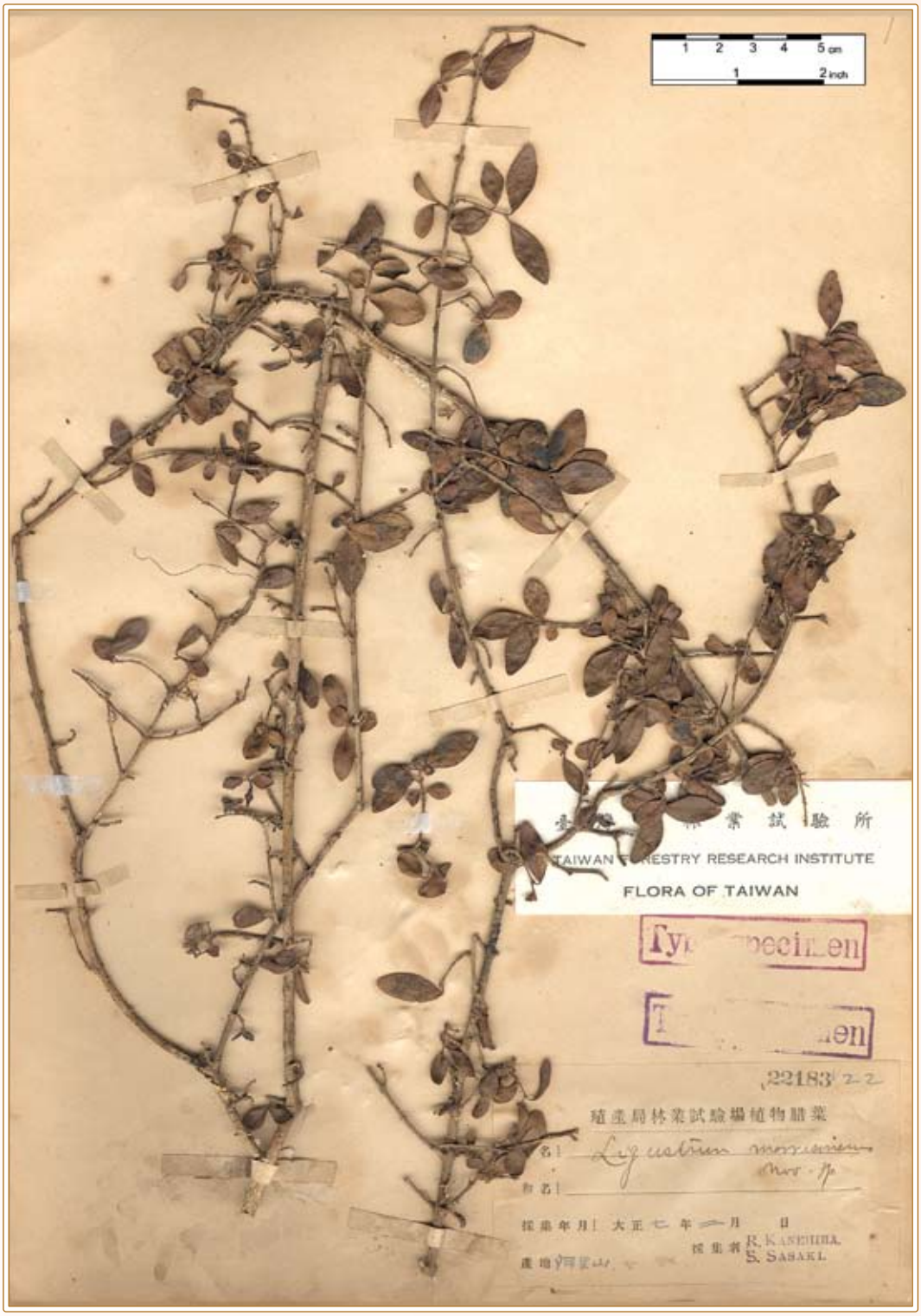
[2] "d" was added to distinguish this from other duplicates.



Ligustrum morrisonensis Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:147. 1931. Syntype. Taiwan, Nanko-taizan, ad 8,000-9,000 ped. alt.[1)] *S. Sasaki s. n.*, 23 July 1922[2)] (TAIF 22180).

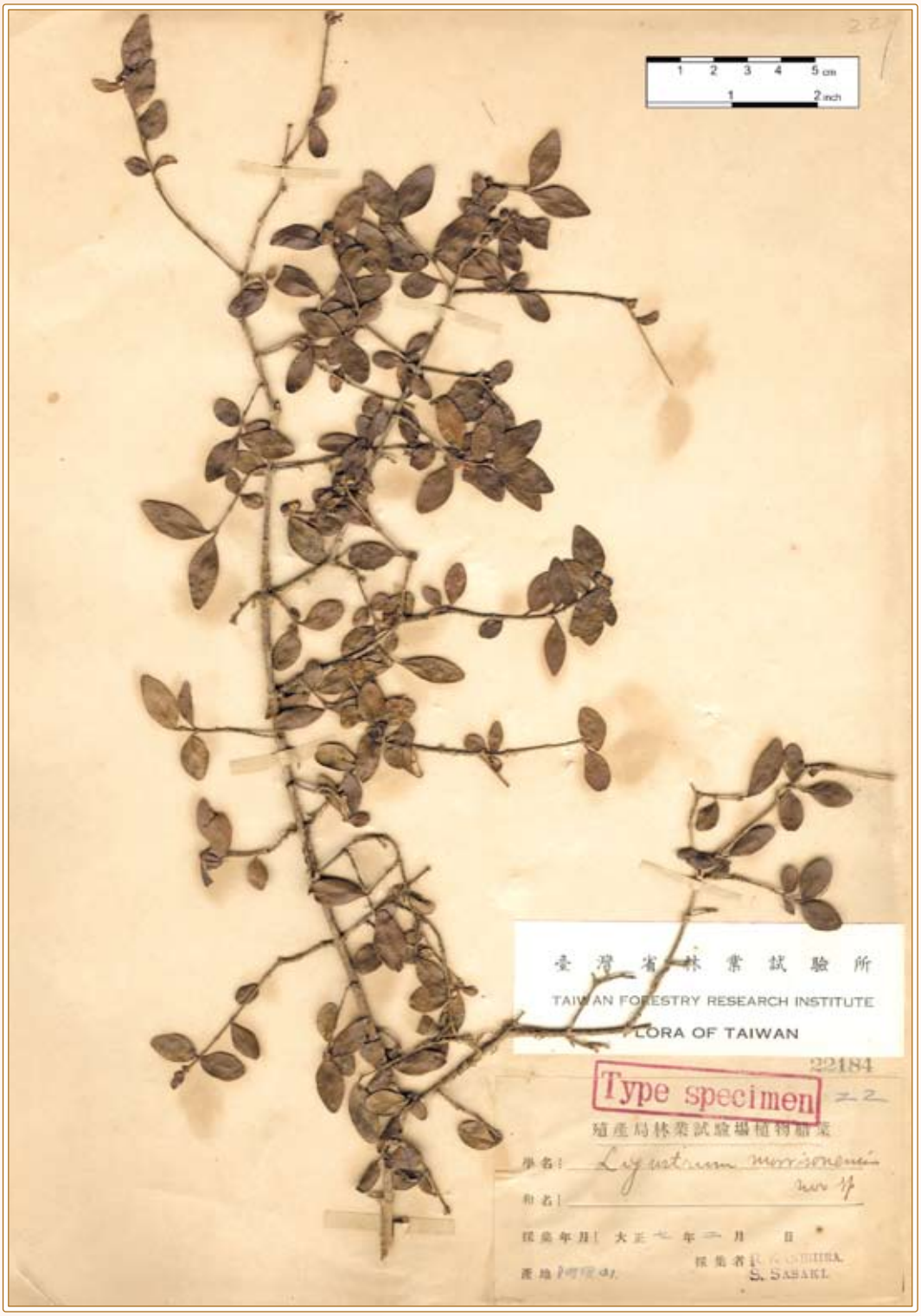
[1)] Nanko-taizan at 8,500 ft.;

[2)] July 1922 (Kanehira 1931).



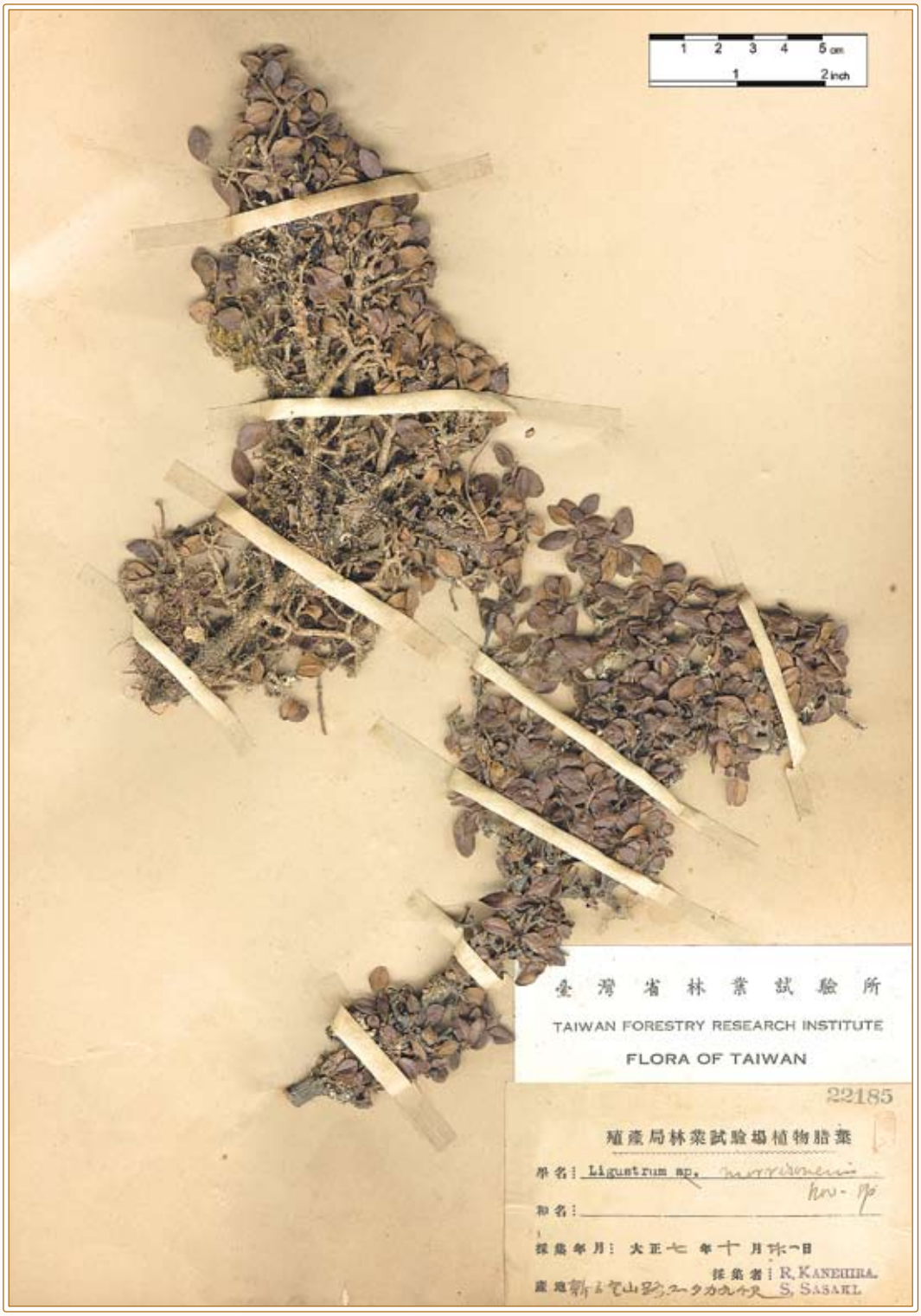
Ligustrum morrisonensis Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:147. 1931. Syntype. Taiwan, Arisan. *R. Kanehira et S. Sasaki 22*,[1)] Feb 1918 (TAIF 22183).

[1)] Leg. *Kanehira et Sasaki*; Collection number unrecorded (Kanehira 1931).



Ligustrum morrisonensis Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:147. 1931. Syntype. Taiwan, Arisan. *R. Kanehira et S. Sasaki 22*,[1)] Feb 1918 (TAIF 22184).

[1)] Leg. *Kanehira et Sasaki*; Collection number unrecorded (Kanehira 1931).



Ligustrum morrisonensis Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:147. 1931. Syntype. Taiwan, Niitakayama, Taataka, ad 9,000 ped. alt. *R. Kanehira et S. Sasaki s. n.*, 21 Oct 1918 [1] (TAIF 22185).

[1] Oct 1918 (Kanehira 1931).



Ligustrum morrisonensis Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:147. 1931. Syntype. Taiwan, Niitakayama, ad 10,000 ped. alt.[1)] *T. Kawakami et U. Mori 1804*, 19 Oct 1906[2)] (TAIF 22186).

[1)] Locality unrecorded;

[2)] Leg. *T. Kawakami et U. Mori*, Oct 1906 (Kanehira 1931).



Ligustrum morrisonensis Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:147. 1931. Syntype. Taiwan, Niitakayama, ad 10,000 ped. alt.[1)] *T. Kawakami et U. Mori 1804*, 19 Oct 1906[2)] (TAIF 22187).

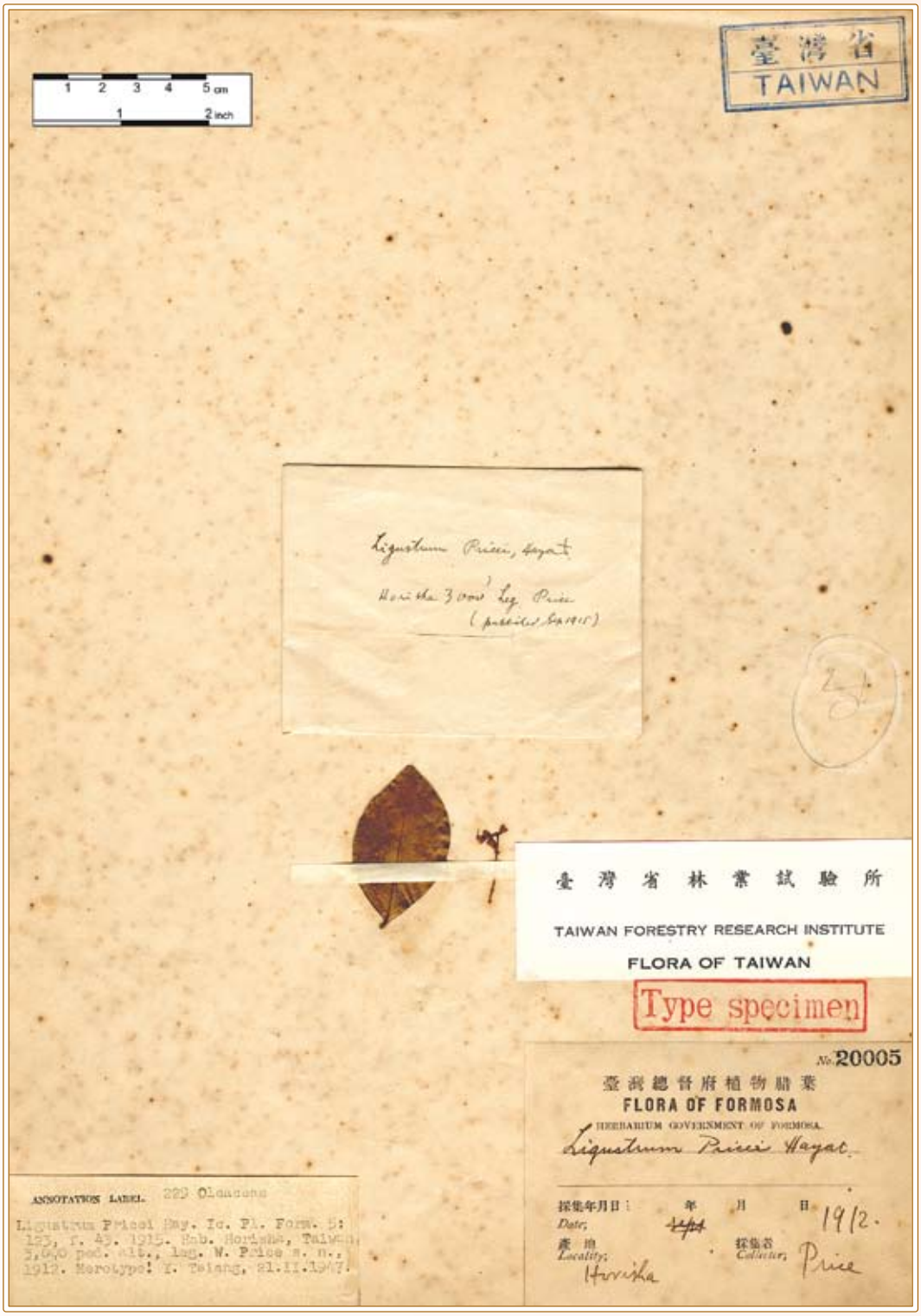
[1)] Locality unrecorded;

[2)] Leg. *T. Kawakami et U. Mori*, Oct 1906 (Kanehira 1931).



Ligustrum morrisonensis Kanehira et Sasaki, Trans. Nat. Hist. Soc. Formos. 21:147. 1931. Syntype. Taiwan, Arisan. *R. Kanehira et S. Sasaki 22*,[1)] Feb 1918 (TAIF 22188).

[1)] Leg. *Kanehira et Sasaki*; Collection number unrecorded (Kanehira 1931).



Ligustrum pricei Hayata, Icon. Pl. Formos. 5:123, *f. 43.* 1915. Type (part). Taiwan, Horisha.[1)] *W. Price s. n.*, 1912 (TAIF 20005).

[1)] Horisha, ad 3,000 ped. alt. (Hayata 1915).



Osmanthus gamostromus Hayata, Icon. Pl. Formos. 9:74, *f. 29.* 1920. Type.[1)] Taiwan, Arisan. *B. Hayata s. n., s. d.*[2)] (TAIF 20046).

[1)] Sasaki (1930) did not list it as a type, but Y. Tsiang treated it as an isotype on the annotation.

[2)] Jan 1912 (Hayata 1920).



Osmanthus integrifolius Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):191. 1911. Type. Taiwan, in monte Morrison, ad 8,000 ped. alt. *T. Kawakami et U. Mori 2003*, 17 Oct 1906[1] (TAIF 20037).

[1] Oct 1906 (Hayata 1911).



Fagraea sasakii Hayata, Icon. Pl. Formos. 3:151, *t. 29.* 1913. Syntype.[1)] Taiwan, Koshun, Hieranzan. *S. Sasaki s. n.*, 16 Feb 1911[2)] (TAIF 20096).

[1)] Sasaki (1930) listed it as a type.

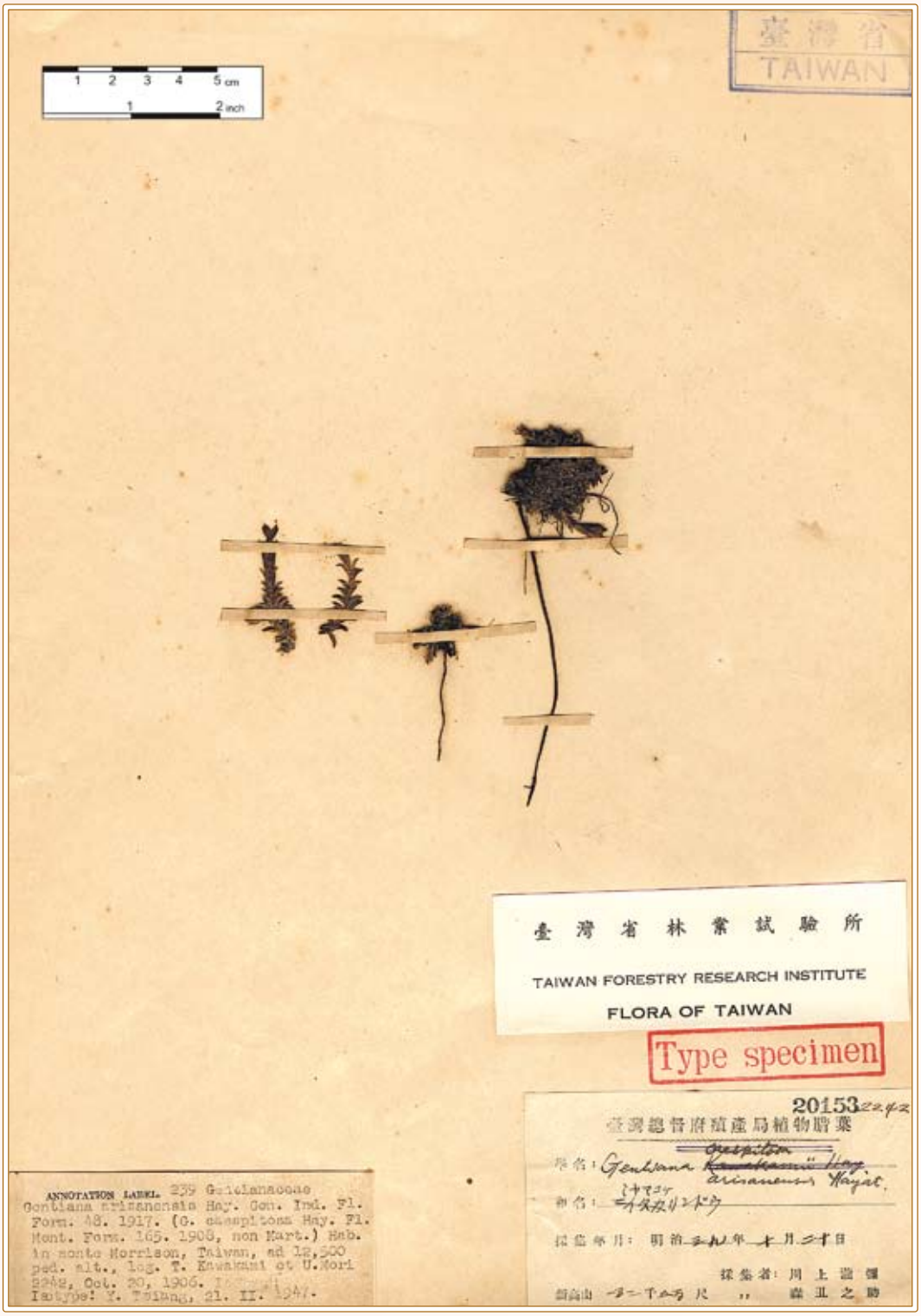
[2)] Feb 1909 (Hayata 1913).



Fagraea sasakii Hayata, Icon. Pl. Formos. 3:151, *t. 29.* 1913. Syntype.[1)] Taiwan, Koshun, Hieranzan. *S. Sasaki s. n.*, Feb 1911[2)] (TAIF 20097).

[1)] Sasaki (1930) listed it as a type.

[2)] Feb 1909 (Hayata 1913)



Gentiana caespitosa Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):165. 1908. Type. Taiwan, in monte Morrison, ad 12,500 ped. alt. *T. Kawakami et U. Mori 2242*, 20 Oct 1906[1)] (TAIF 20153).

[1)] Oct 1906 (Hayata 1908).



Gentiana parvifolia Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):201. 1911. Type. Taiwan, Randaizan. *T. Kawakami et U. Mori 7117*, 9 Aug 1908 [1] (TAIF 20189).

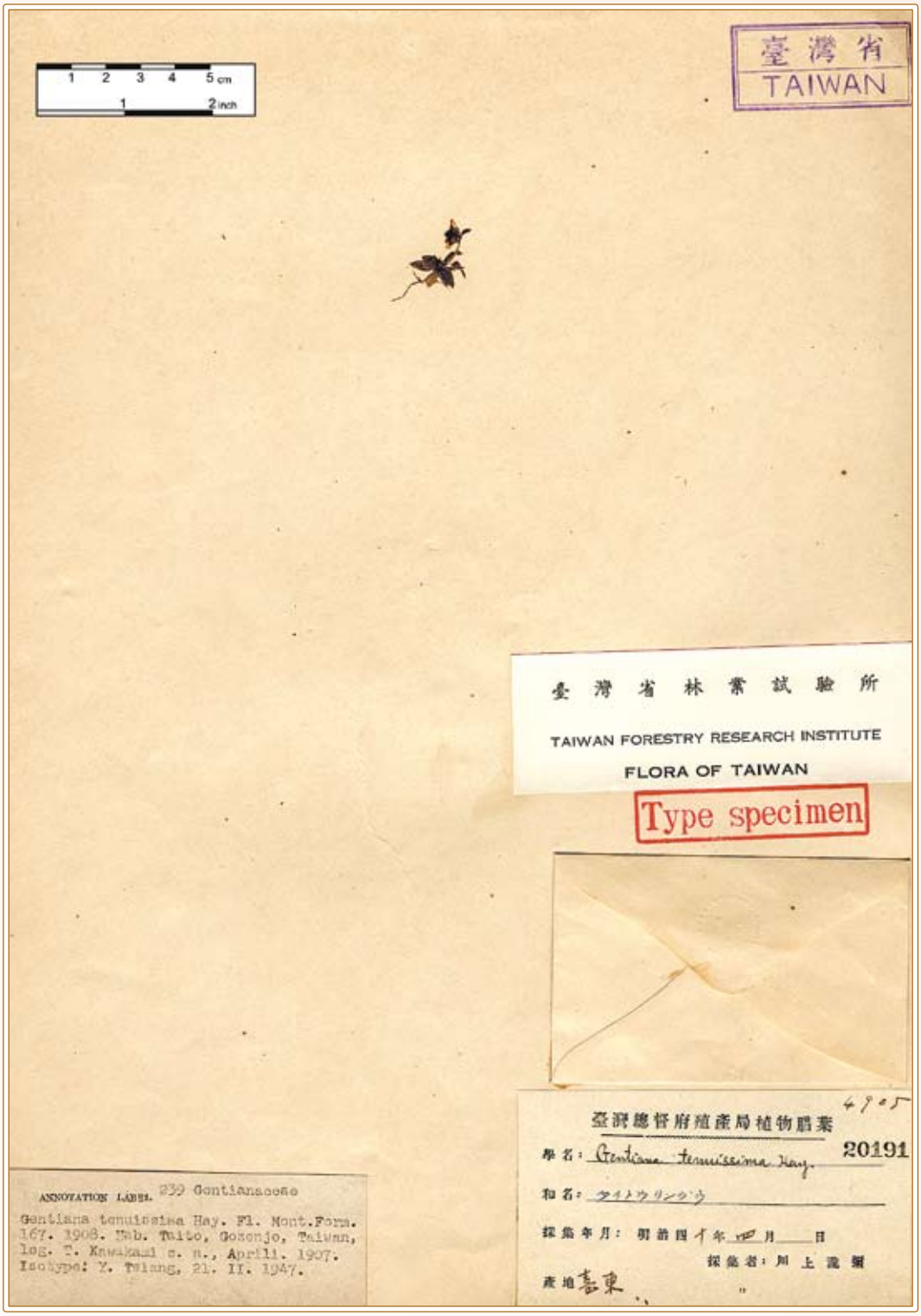
[1] Leg. *B. Hayata et U. Mori*, Aug 1908, (No. 7117) (Hayata 1911).



Gentiana scabrida Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):168. 1908. Syntype. Taiwan, in monte Morrison, ad 10,000 ped. alt.[1] *T. Kawakami et U. Mori 2275*, 19 Oct 1906[2] (TAIF 20180).

[1] in monte Morrison;

[2] Oct 1906 (Hayata 1908).

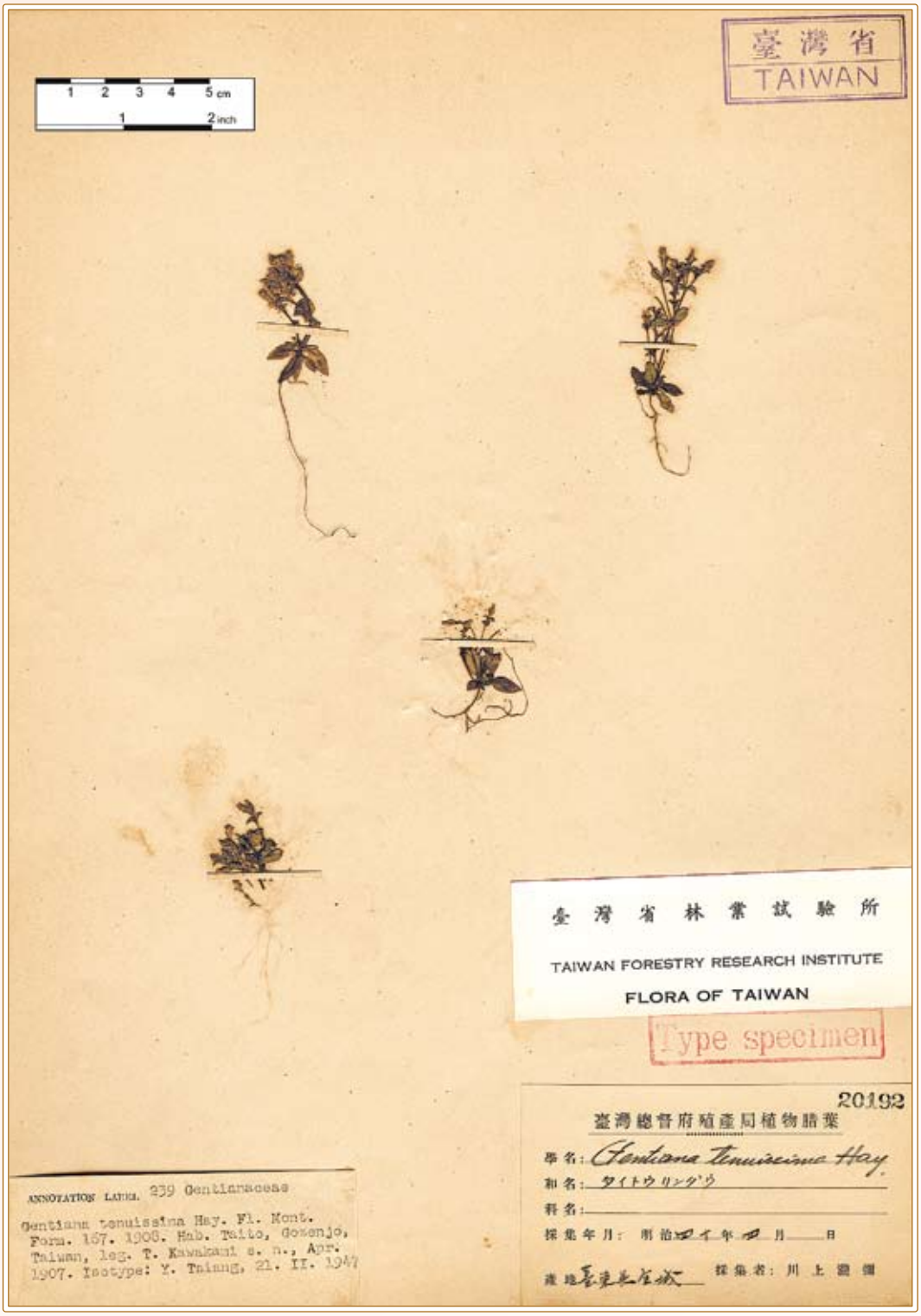


Gentiana tenuissima Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):167. 1908. Type (part).[1)] Taiwan, Taito.[2)] *T. Kawakami 4905*, Apr 1907[3)] (TAIF 20191).

[1)] Sasaki (1930) listed it as a type.

[2)] Taito: Gozenjo;

[3)] Leg. *T. Kawakami*; collection date unrecorded (Hayata 1908).



Gentiana tenuissima Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):167. 1908. Type.[1)] Taiwan, Taito, Gozenjo. *T. Kawakami s. n.*, Apr 1907[2)] (TAIF 20192).

[1)] Sasaki (1930) listed it as a type.

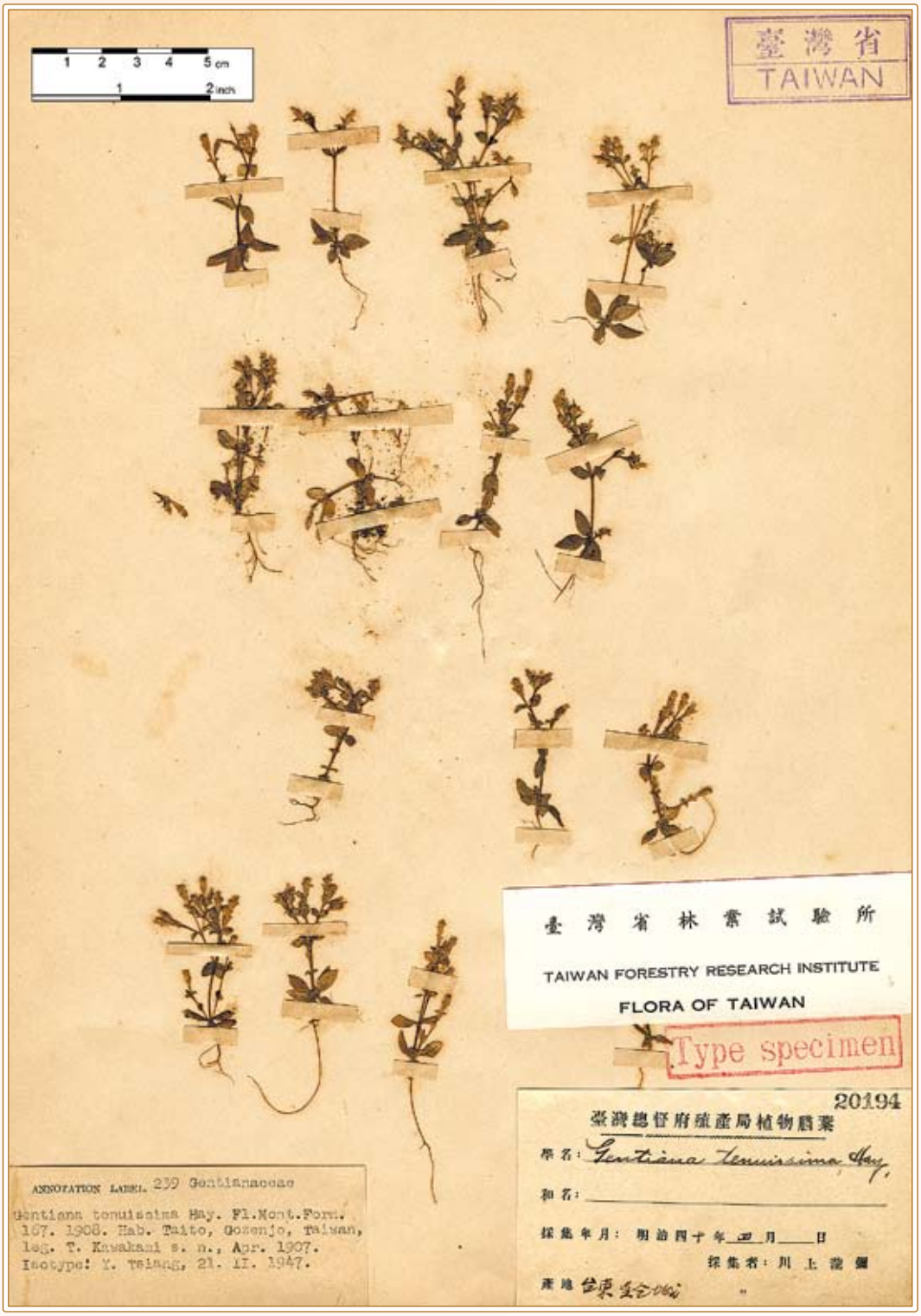
[2)] Collection date unrecorded (Hayata 1908).



Gentiana tenuissima Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):167. 1908. Type.[1)] Taiwan, Taito, Gozenjo. *T. Kawakami s. n.*, Apr 1907[2)] (TAIF 20193).

[1)] Sasaki (1930) listed it as a type.

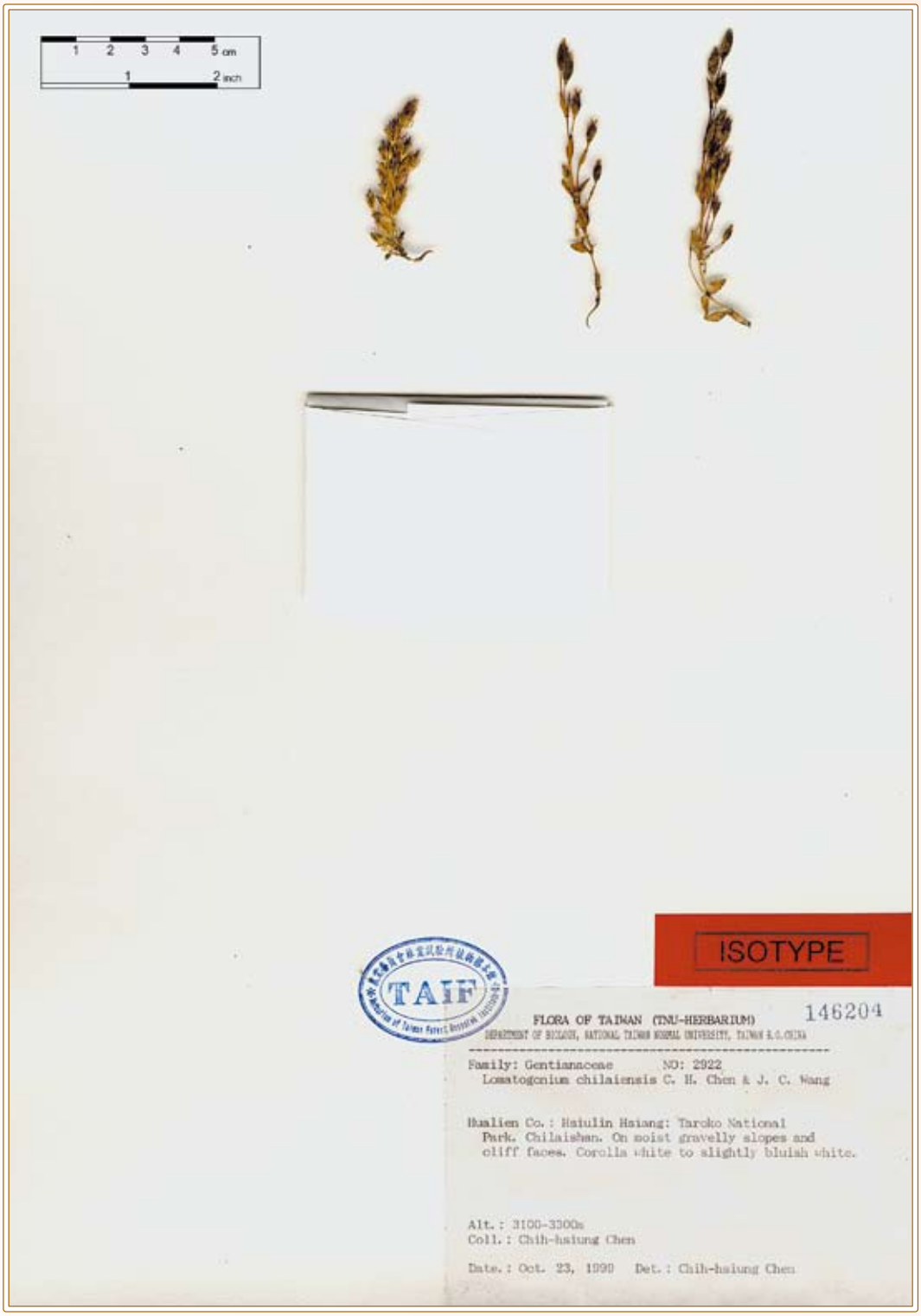
[2)] Collection date unrecorded (Hayata 1908).



Gentiana tenuissima Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):167. 1908. Type.[1)] Taiwan, Taito, Gozenjo. *T. Kawakami s. n.*, Apr 1907[2)] (TAIF 20194).

[1)] Sasaki (1930) listed it as a type.

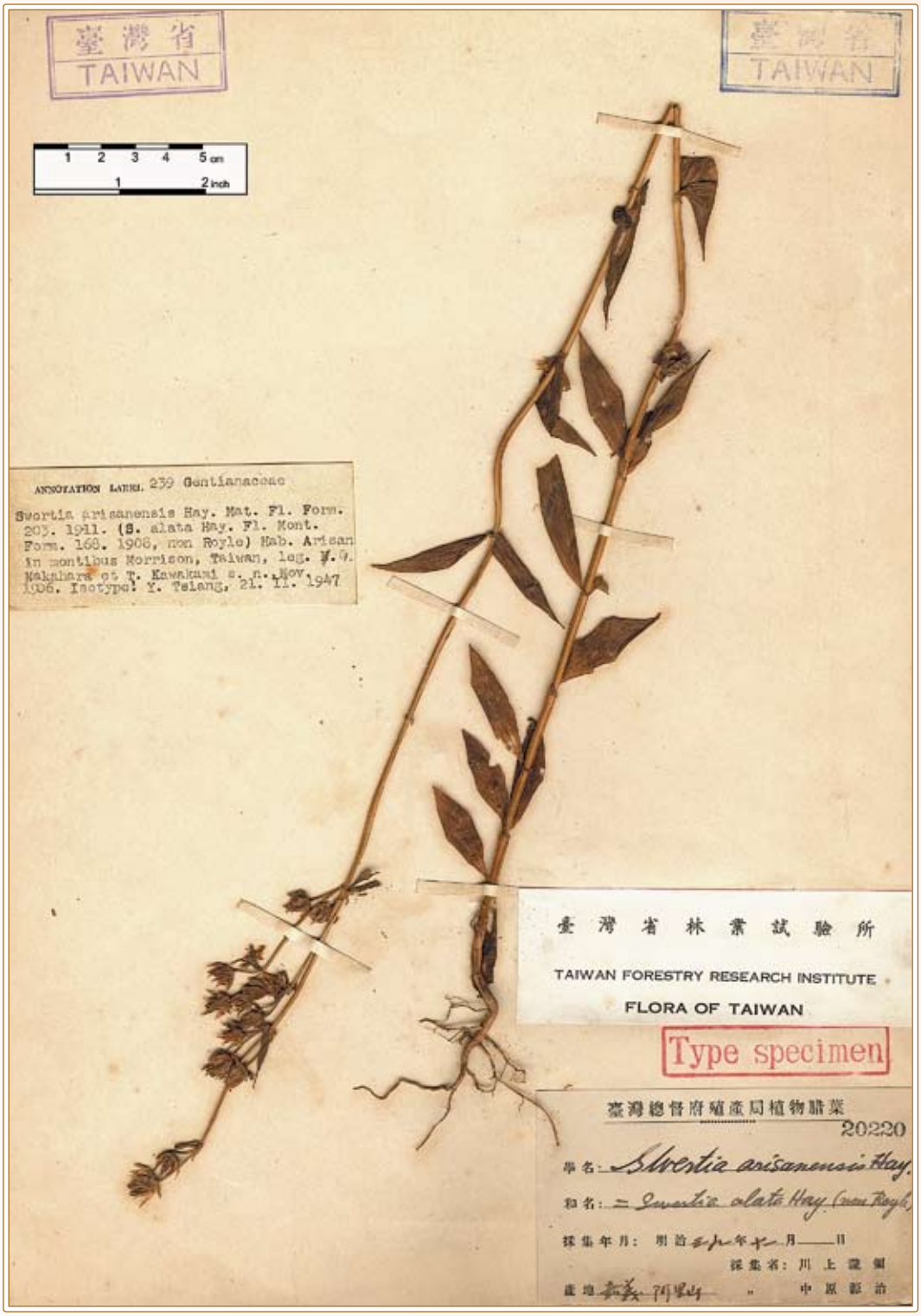
[2)] Collection date unrecorded (Hayata 1908).



Lomatogonium chilaiensis C. H. Chen & J. C. Wang, Bot. Bull. Acad. Sinica 41(4):324, *f. 1, 2*. 2000. Isotype. Taiwan, Hualien, Hsiulin, Taroko National Park, Chilaishan, elev. ca. 3,100-3,300 m. *C. H. Chen 2922*, 23 Oct 1999 (TAIF 146204).



Nymphoides lungtanensis S. P. Li, T. H. Hsieh & C. C. Lin, Taiwania 47(4):254, *f. 1A, B, C, 5*. 2002. Holotype. Taiwan, Taoyuan, Lungtan. *C. C. Lin 170*, 24 Mar 2001 (TAIF 133333).



Swertia alata Hayata, J. Coll. Sci. Imp. Univ. Tokyo 25(19):168. 1908. Type.[1)] Taiwan, Kagi, Arizan.[2)] *T. Kawakami et G. Nakahara s. n.*, Nov 1906[3)] (TAIF 20220).

[1)] Sasaki (1930) listed it as a type.

[2)] Arizan, in montibus Morrison;

[3)] Leg. *G. Nakahara*, Oct 1906 (Hayata 1908).



Swertia randaiensis Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):203. 1911. Syntype. Taiwan, Randaizan. *T. Kawakami et U. Mori 7114*, 9 Aug 1908 [1] (TAIF 20229).

[1] Leg. *B. Hayata et U. Mori*, Aug 1908, (No. 7114) (Hayata 1911).



Swertia shintenensis Hayata, Icon. Pl. Formos. 6:31. 1916. Topotype.[1)] Taiwan, Taihoku, Shinten, ad 800 m alt.[2)] *U. Faurie 820*, Dec 1914[3)] (TAIF 20234).

[1)] Sasaki (1930) listed this specimen as a type but mislabeled the accession number as 20284 which would be *Cerbera manghas* Linne.

[2)] in monte Shinten, 2,400 ped. alt.;

[3)] Leg. *U. Faurie*, Nov 1914, (No. 1256) (Hayata 1916).



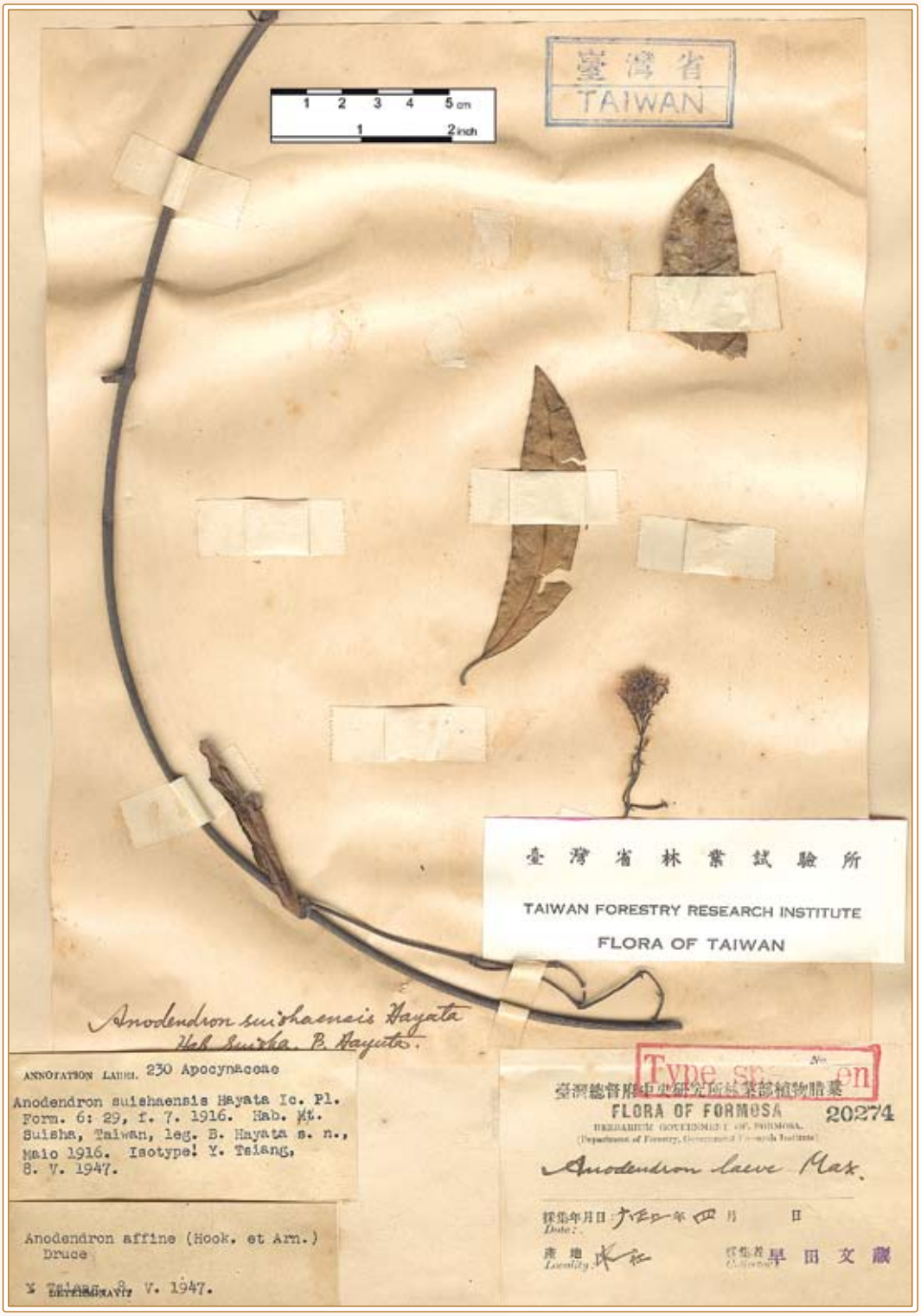
Alyxia taiwanensis Lu & Yang, Bot. Bull. Acad. Sin. 19(2):195, *f. 1.* 1978. Holotype. Taiwan, Taichung, Chinshan. *S. Y. Lu 5936*, 15 Oct 1976 (TAIF 51858-1[1)]).

[1)] "1" was added to distinguish this from other duplicates.



Alyxia taiwanensis Lu & Yang, Bot. Bull. Acad. Sin. 19(2):195, *f. 1*. 1978. Isotype. Taiwan, Taichung, Chinshan. *S. Y. Lu 5936*, 15 Oct 1976 (TAIF 51858-3 [1]).

[1] "3" was added to distinguish this from other duplicates.



Anodendron suishaense Hayata, Icon. Pl. Formos. 6:29, *pl. 7*. 1916. Type.[1)] Taiwan, Suisha.[2)] *B. Hayata s. n.*, Apr 1916[3)] (TAIF 20274).

[1)] Sasaki (1930) did not list it as a type, but Y. Tsiang treated it as an isotype on the annotation.

[2)] Monte Suisha;

[3)] May 1916 (Hayata 1916).

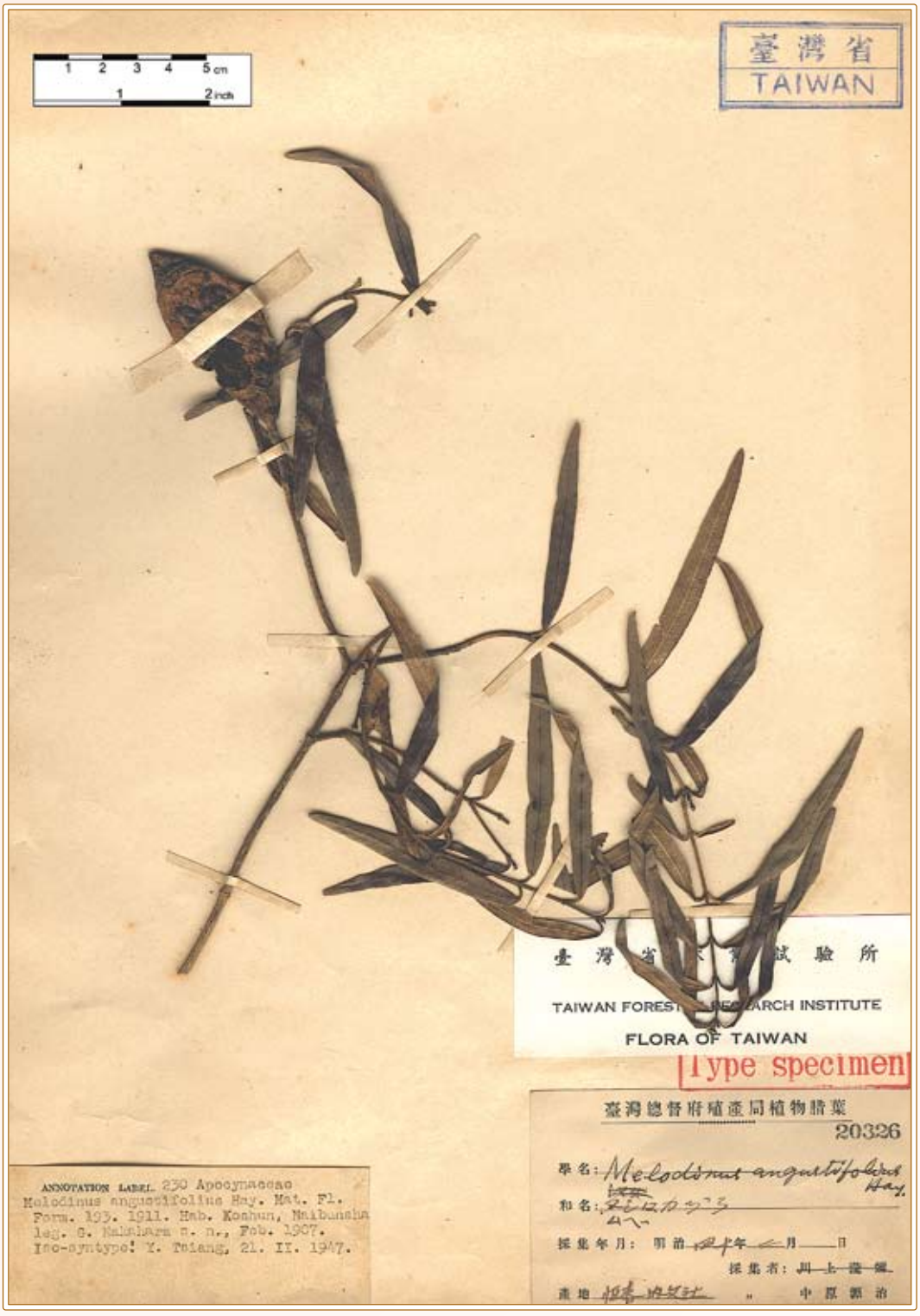


Ecdysanthera utilis Hayata et Kawakami, Mag. Bot. Tokyo 20:51. 1906. Type.[1] Taiwan, Shintiku.[2] *T. Kawakami s. n.*, May 1906[3] (TAIF 20307).

[1] Sasaki (1930) listed it as a type.

[2] Shinko, Shintiku (Hayata 1906); Shintiku = Shinchiku.

[3] Mar 1906 (Hayata 1906).



Melodinus angustifolius Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):193. 1911. Syntype. Taiwan, Koshun, Naibunsha. *G. Nakahara s. n.*, Feb 1907 (TAIF 20326).



Melodinus angustifolius Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):193. 1911. Syntype.[1)] Taiwan, Koshun, Naibunsha. *G. Nakahara 5901*,[2)] Feb 1907 (TAIF 20327).

[1)] Sasaki (1930) listed it as a type.

[2)] Leg. *G. Nakahara* (Hayata 1911).



Melodinus angustifolius Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):193. 1911. Syntype. Taiwan, Koshun, Kurarusha. *T. Kawakami 1621*, 2 July 1906[1)] (TAIF 20329).

[1)] July 1906 (Hayata 1911).



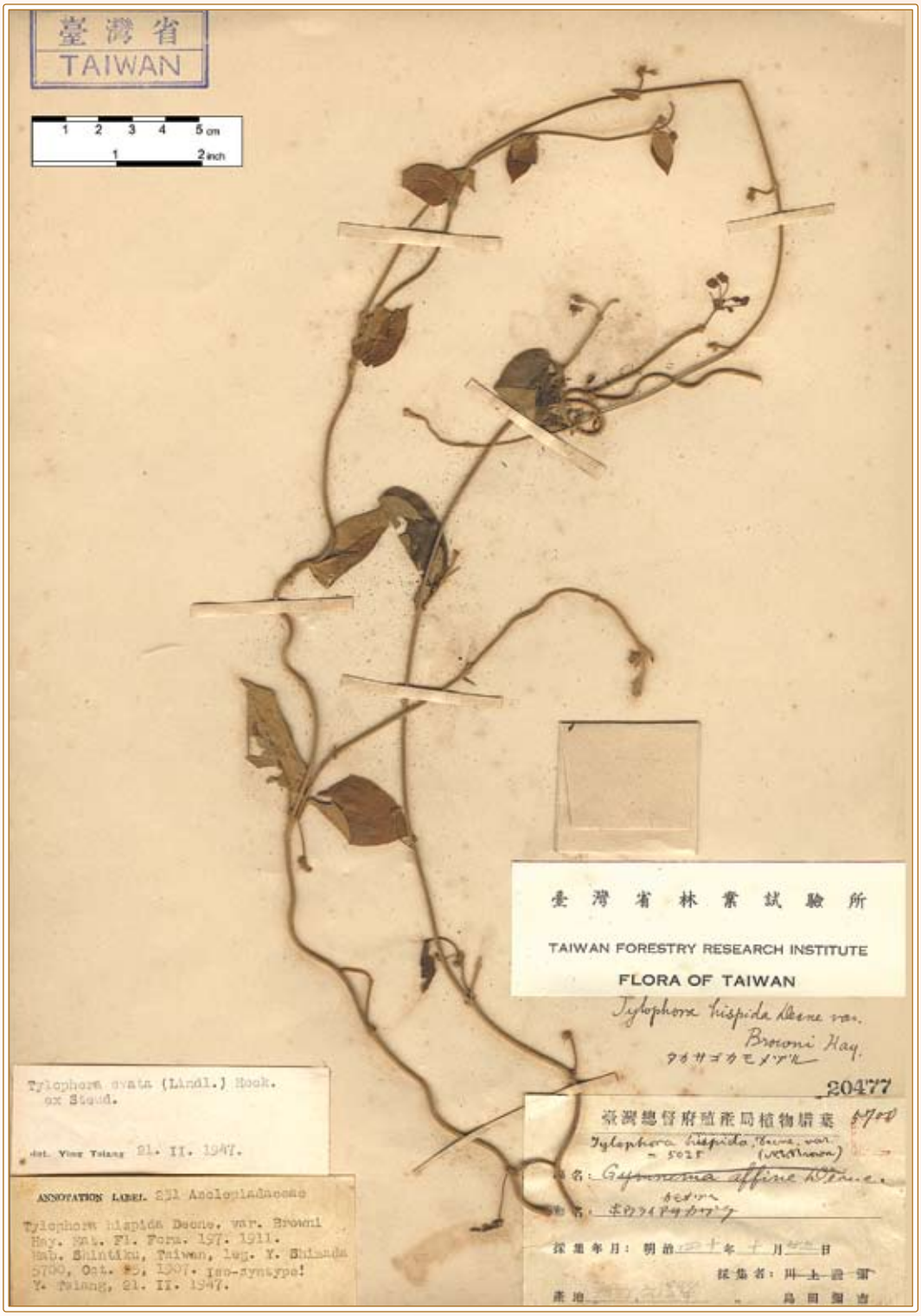
Melodinus angustifolius Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):193. 1911. Syntype. Taiwan, Taito, Pashiko. *Z. Kobayashi 1552*, 24 June 1906[1)] (TAIF 20330).

[1)] June 1906 (Hayata 1911).



Tylophora browni Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):195. 1911. Type. Taiwan, Koshun, Kurarusha. *T. Kawakami 1648*, 2 July 1906[1)] (TAIF 20475).

[1)] July 1905 (Hayata 1911).



Tylophora hispida Decne. var. *browni* Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):196. 1911. Syntype. Taiwan, Shintiku, Rokutyori.[1] *Y. Shimada 5700*, 25 Oct 1907[2] (TAIF 20477).

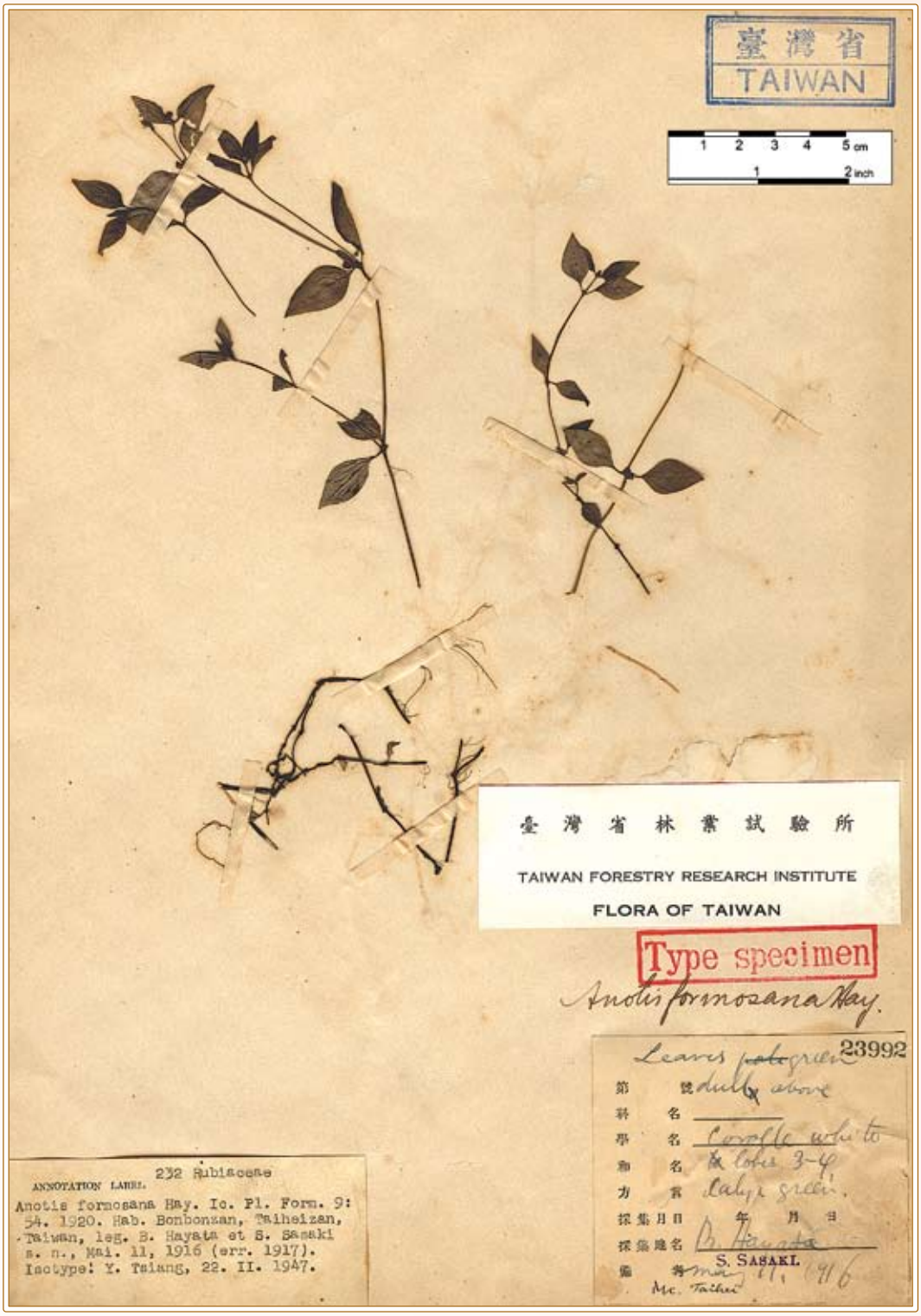
[1] Shintiku;

[2] Collection date unrecorded (Hayata 1911).



Tylophora hispida Decne. var. *browni* Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):196. 1911. Syntype. Taiwan, Taito, Maraoo. *Z. Kobayashi 5025*, 6 Aug 1907[1] (TAIF 20479).

[1] Leg. *T. Kawakami et Z. Kobayashi*, Aug 1908, (No. 5025) (Hayata 1911).



Anotis formosana Hayata, Icon. Pl. Formos. 9:54. 1920. Type.[1)] Taiwan, Mt. Taihei.[2)] *B. Hayata et S. Sasaki s. n.*, 11 May 1916[3)] (TAIF 23992).

[1)] Sasaki (1930) listed it as a type.

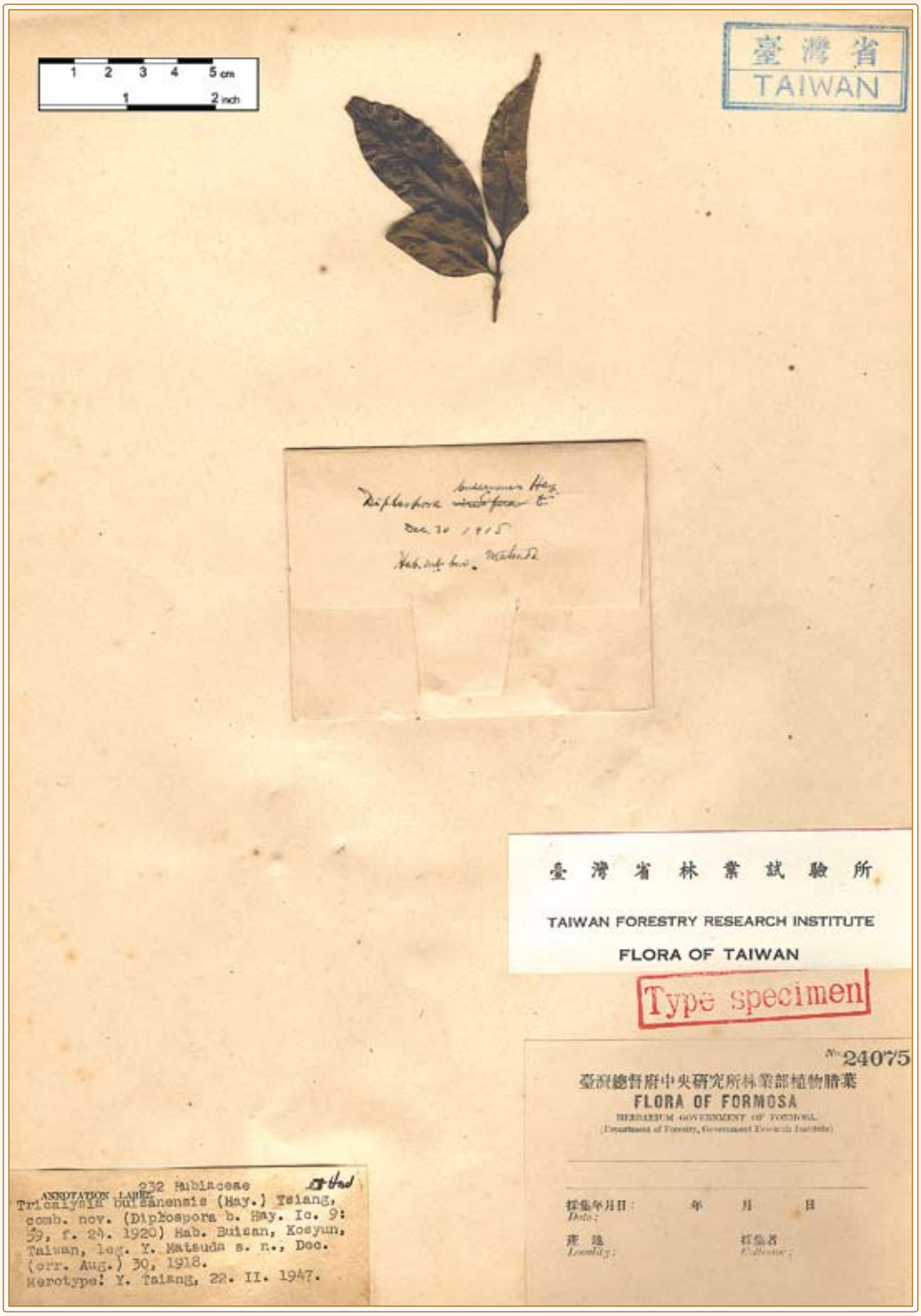
[2)] Bonbonzan, Taiheizan;

[3)] May 1917 (Hayata 1920).



Damnacanthus angustifolius Hayata var. *altimontanus* Liao, Bull. Exp. Forest NTU 117:134. 1976. Isotype. Taiwan, Chishan, Chitou, Fonghuanshan, ad 1,600-1,800 m alt.[1)] *J. C. Liao 11636*, 10 Feb 1976 (TAIF 137222).

[1)] Cir. 1,600 m, Honghuangshan, Sitou, Nanto (Liao 1976); Chitou = Sitou.



Diplospora buisanensis Hayata, Icon. Pl. Formos. 9:59, *f. 24.* 1920. Type (part).[1)] Taiwan, Mt. Bui.[2)] *Y. Matsuda s. n.*, 30 Dec 1918[3)] (TAIF 24075).

[1)] Sasaki (1930) listed it as a type.

[2)] Buizan;

[3)] Aug 1918 (Hayata 1920).



Diplospora buisanensis Hayata, Icon. Pl. Formos. 9:59, *f. 24.* 1920. Type.[1)] Taiwan, Takaw, Buizan. *Y. Matsuda s. n.*, 30 Dec 1918[2)] (TAIF 24076).

[1)] Sasaki (1930) listed it as a type.

[2)] Aug 1918 (Hayata 1920).



Diplospora buisanensis Hayata, Icon. Pl. Formos. 9:59, *f. 24.* 1920. Type.[1)] Taiwan, Takaw, Buizan. *Y. Matsuda s. n.*, 30 Dec 1918[2)] (TAIF 24077).

[1)] Sasaki (1930) listed it as a type.

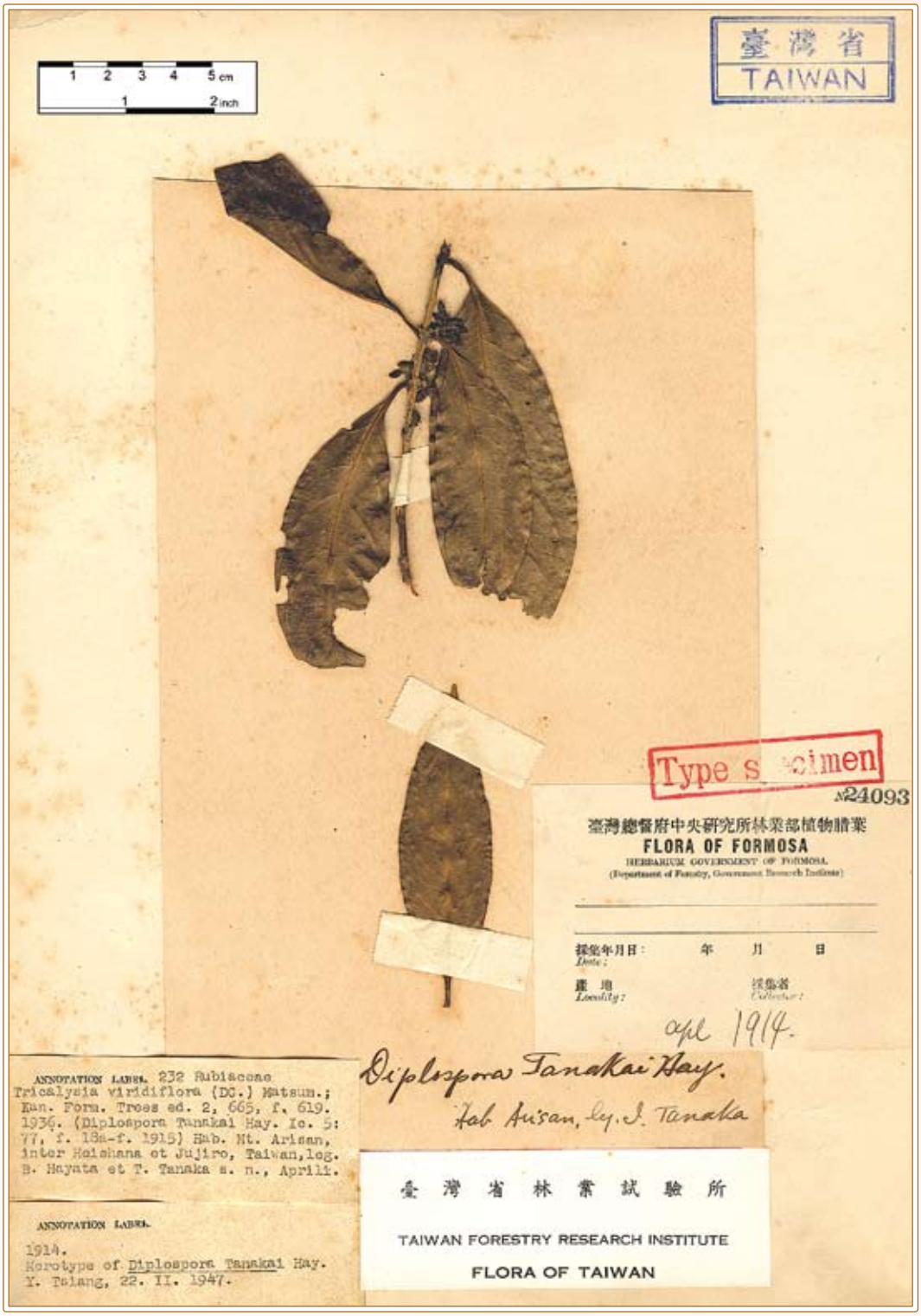
[2)] Aug 1918 (Hayata 1920).



Diplospora buisanensis Hayata, Icon. Pl. Formos. 9:59, *f. 24.* 1920. Type.[1)] Taiwan, Takaw, Buizan. *Y. Matsuda s. n.*, 30 Dec 1918[2)] (TAIF 24078).

[1)] Sasaki (1930) listed it as a type.

[2)] Aug 1918 (Hayata 1920).



Diplospora tanakai Hayata, Icon. Pl. Formos. 5:77, *f. 18 a-f.* 1915. Type (part).[1)] Taiwan, Arisan.[2)] *I. Tanaka s. n.*,[3)] Apr 1914 (TAIF 24093).

[1)] Sasaki (1930) listed it as a type.

[2)] Mt. Arisan, inter Heishana *et* Jujiro;

[3)] Leg. *R. Kanehira et T. Tanaka* (Hayata 1915).

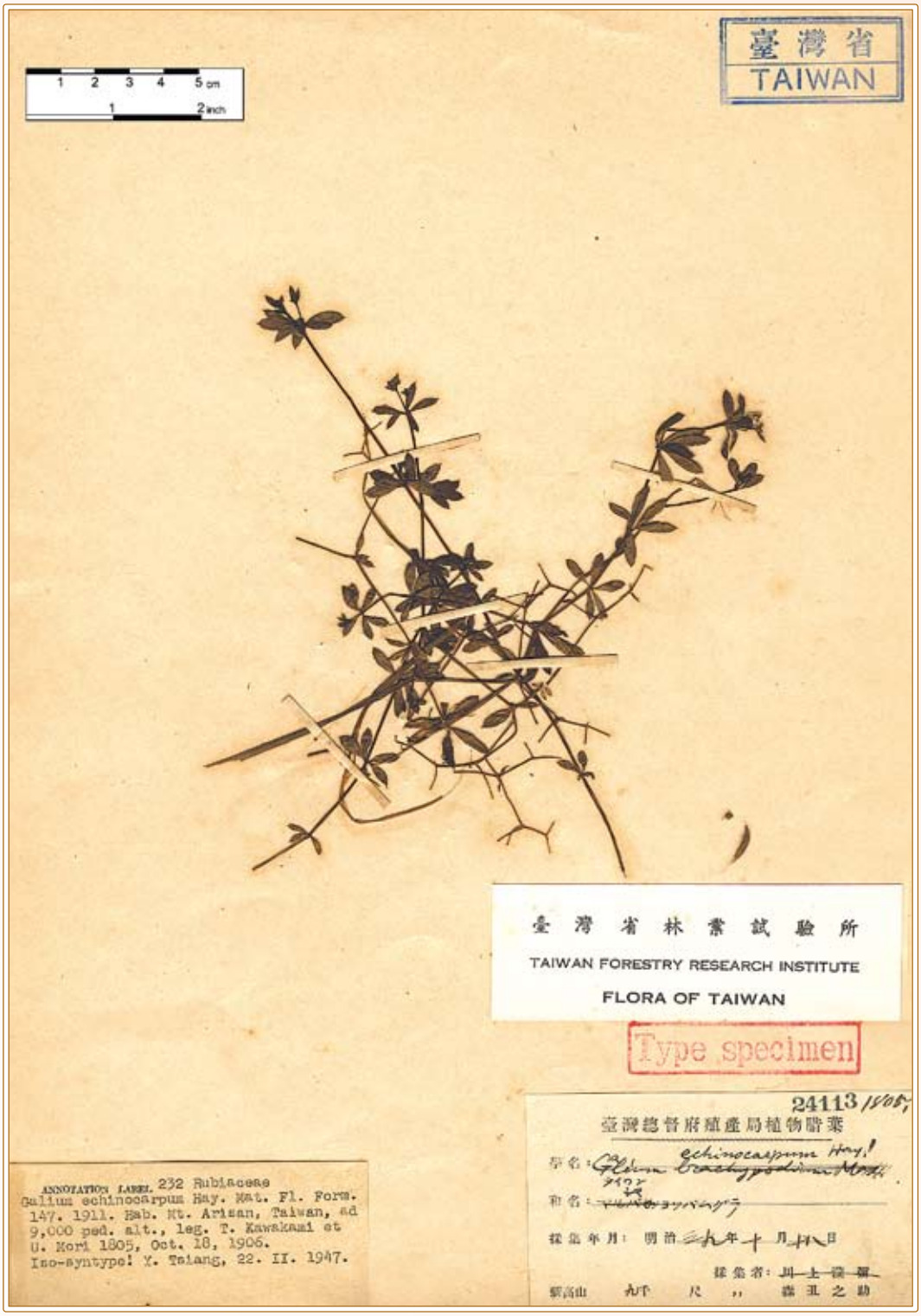


Diplospora tanakai Hayata, Icon. Pl. Formos. 5:77, *f. 18 a-f.* 1915. Type.[1)] Taiwan, Arisan, inter Karapin *et* Suisyaryo.[2)] *B. Hayata et T. Tanaka s. n.*, 23 Apr 1914[3)] (TAIF 24096).

[1)] Sasaki (1930) listed it as a type.

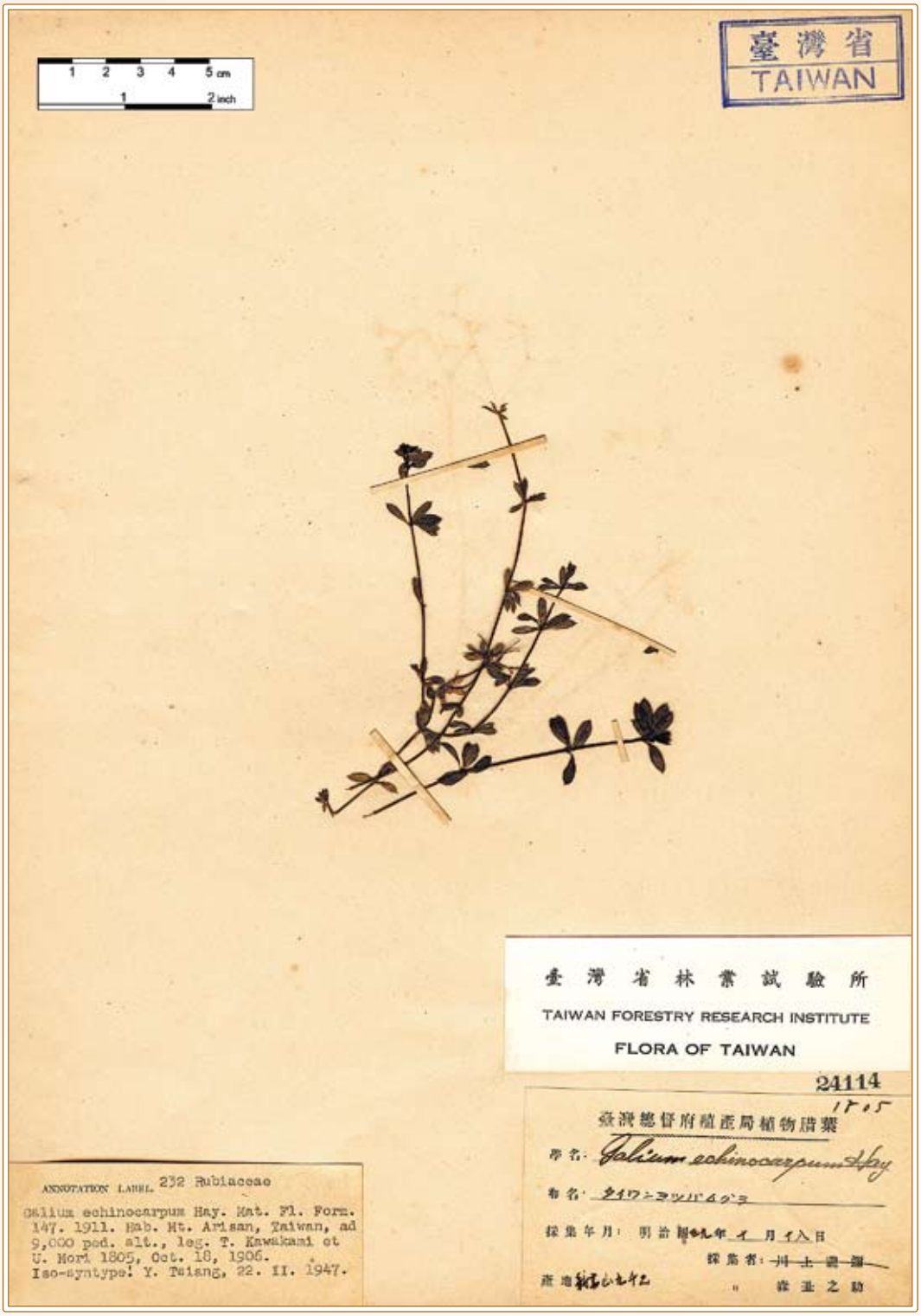
[2)] Mt. Arisan, inter Heishana *et* Jujiro;

[3)] Leg. *R. Kanehira et T. Tanaka*, Apr 1914 (Hayata 1915).



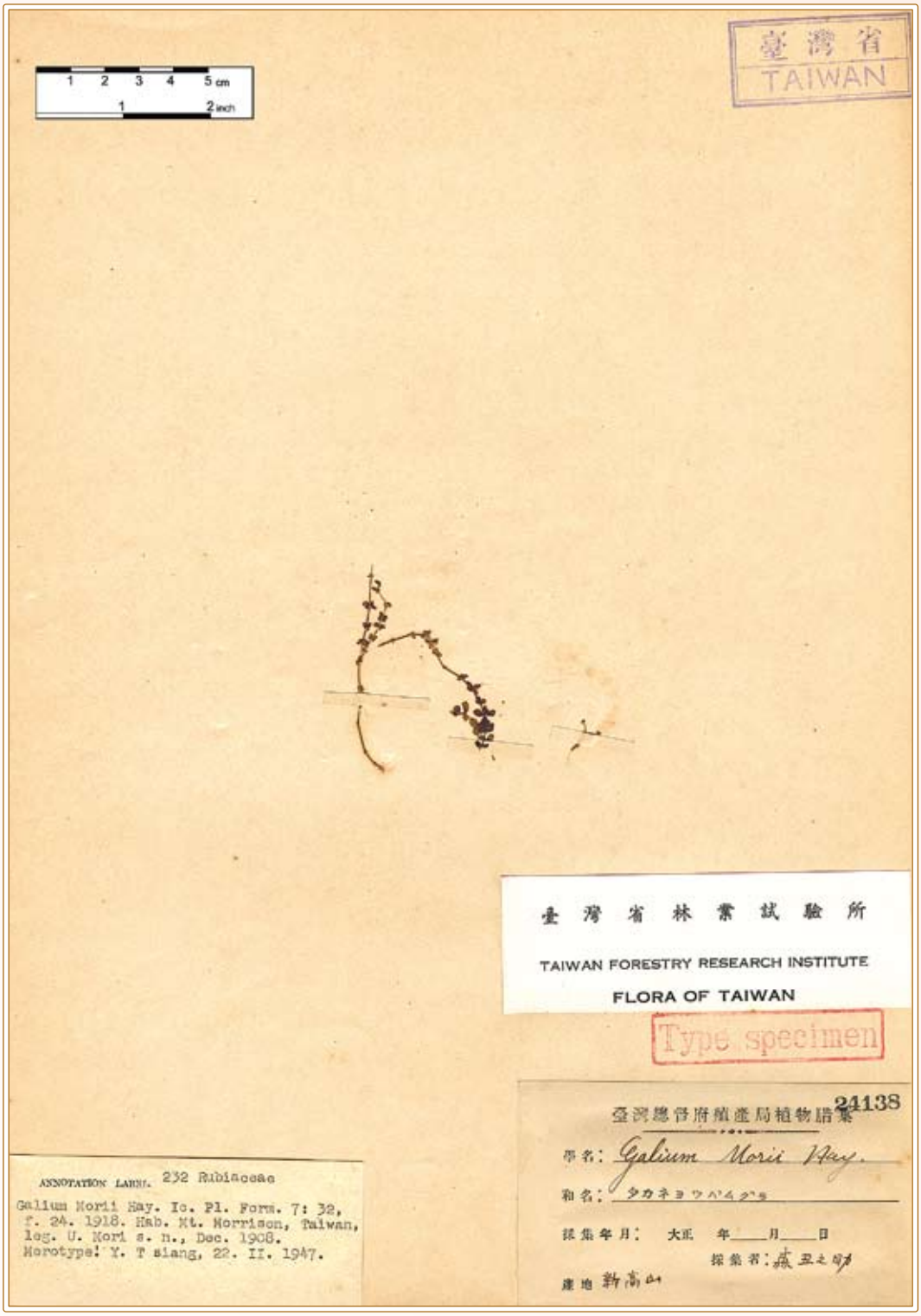
Galium echinocarpum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):147. 1911. Syntype. Taiwan, in monte Morrison, ad 9,000 ped. alt. *U. Mori 1805*, 18 Oct 1906 [1] (TAIF 24113).

[1] Leg. *T. Kawakami et U. Mori,* Oct 1906, (No. 1805) (Hayata 1911).



Galium echinocarpum Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):147. 1911. Syntype. Taiwan, in monte Morrison, ad 9,000 ped. alt. *U. Mori 1805*, 18 Oct 1906[1)] (TAIF 24114).

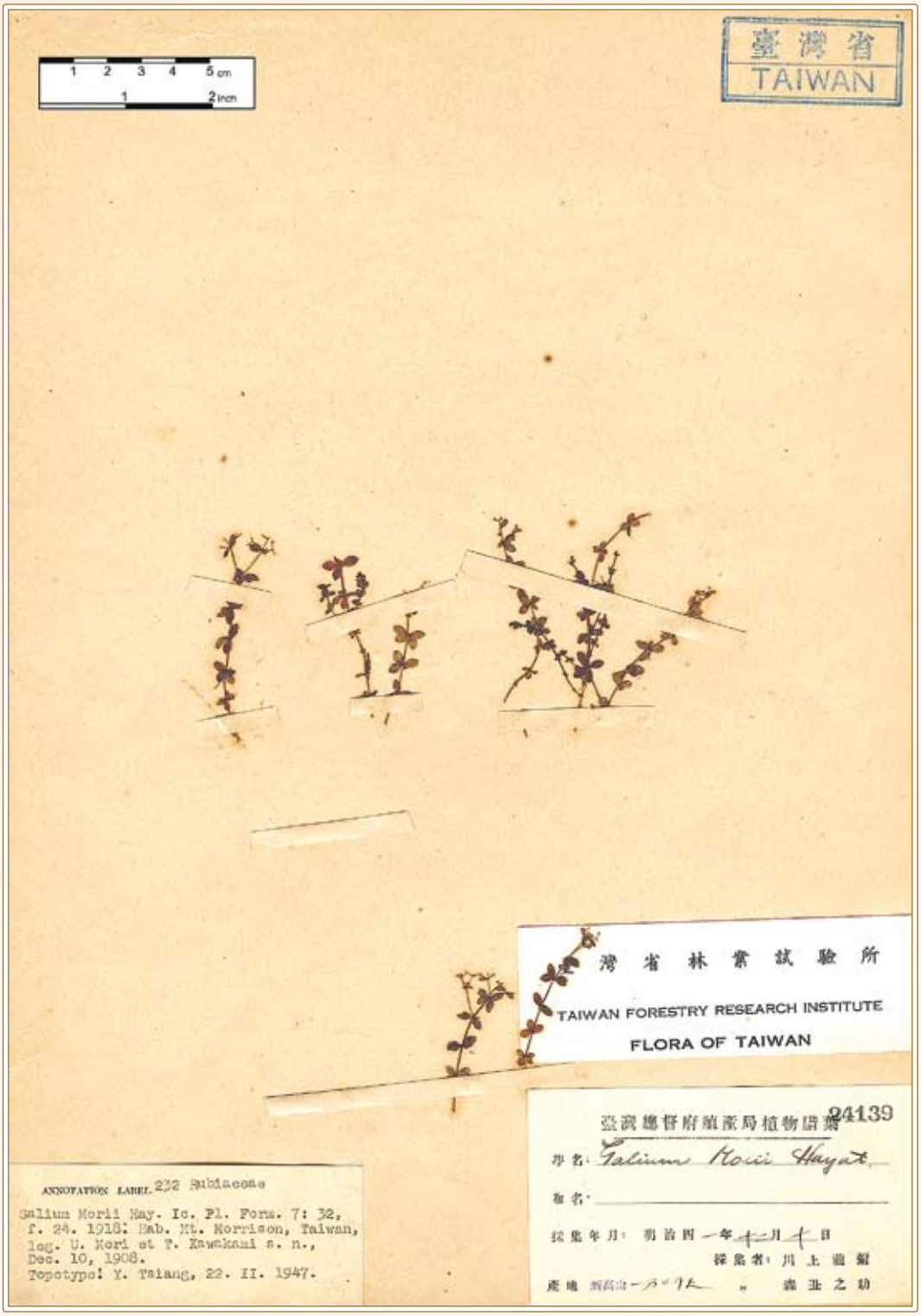
[1)] Leg. *T. Kawakami et U. Mori*, Oct 1906, (No. 1805) (Hayata 1911).



Galium morii Hayata, Icon. Pl. Formos. 7:32, *f. 24.* 1918. Type.[1)] Taiwan, Mt. Morrison. *U. Mori s. n., s. d.*[2)] (TAIF 24138).

[1)] Sasaki (1930) listed it as a type.

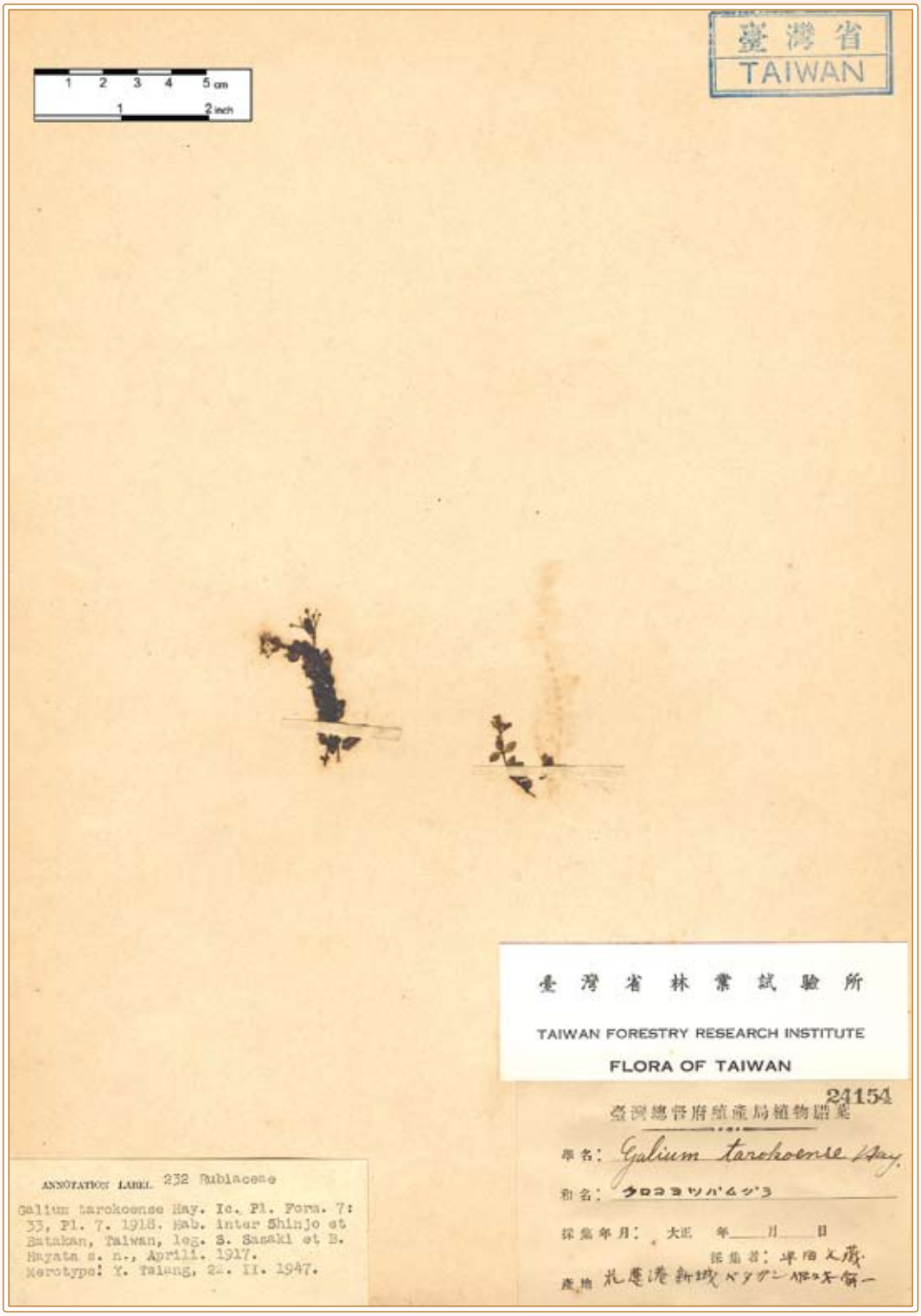
[2)] Dec 1908 (Hayata 1918).



Galium morii Hayata, Icon. Pl. Formos. 7:32, *f. 24.* 1918. Type. Taiwan, Mt. Morrison, ad 12,000 ped. alt.[1)] *T. Kawakami et U. Mori s. n.*, 10 Dec 1908[2)] (TAIF 24139).

[1)] Mt. Morrison;

[2)] Leg. *U. Mori*, Dec 1908 (Hayata 1918).



Galium tarokoense Hayata, Icon. Pl. Formos. 7:33, *pl. 7.* 1918. Type.[1)] Taiwan, Kwarenko, Shinjo, Batakan. *B. Hayata et S. Sasaki s. n., s. d.*[2)] (TAIF 24154).

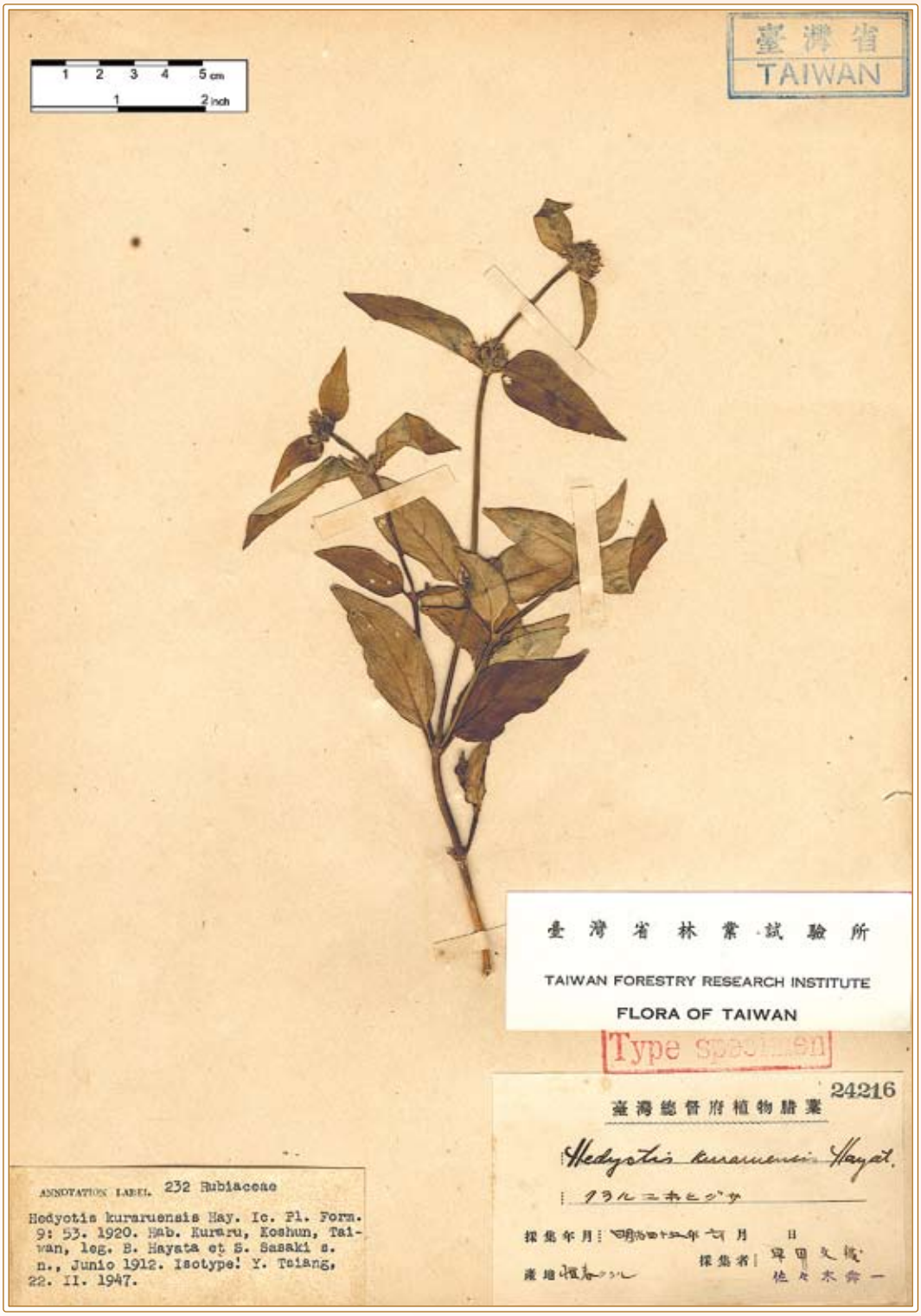
[1)] Sasaki (1930) did not list it as a type, but Y. Tsiang treated it as a merotype on the annotation.

[2)] Apr 1917 (Hayata 1918).



Gardenia augusta (Linn.) Merr. var. *kosyunensis* Sasaki, Tran. Nat. Hist. Soc. Formos. 18:216. 1928. Type. Taiwan, Kosyun, Kuraru. *K. Yamada s. n.*, 18 Feb 1916[1)] (TAIF 24187).

[1)] Feb 1916 (Sasaki 1928).



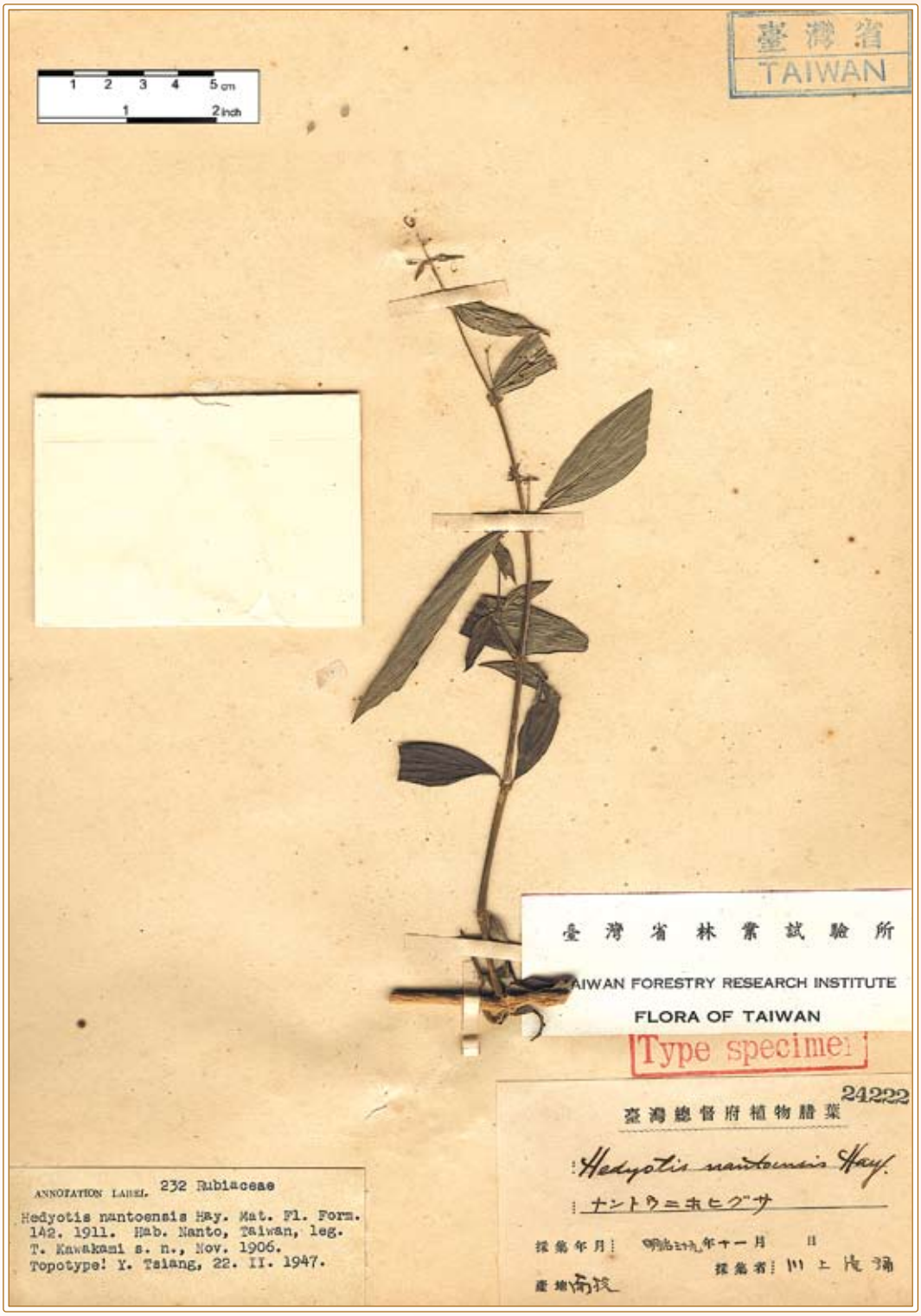
Hedyotis kuraruensis Hayata, Icon. Pl. Formos. 9:53. 1920. Type. Taiwan, Koshun, Kuraru. *B. Hayata et S. Sasaki s. n.*, June 1912 (TAIF 24216).



Hedyotis nantoensis Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):142. 1911. Syntype.[1)] Taiwan, Nanto. *T. Kawakami s. n.*, Nov 1906[2)] (TAIF 24221).

[1)] Sasaki (1930) listed it as a type.

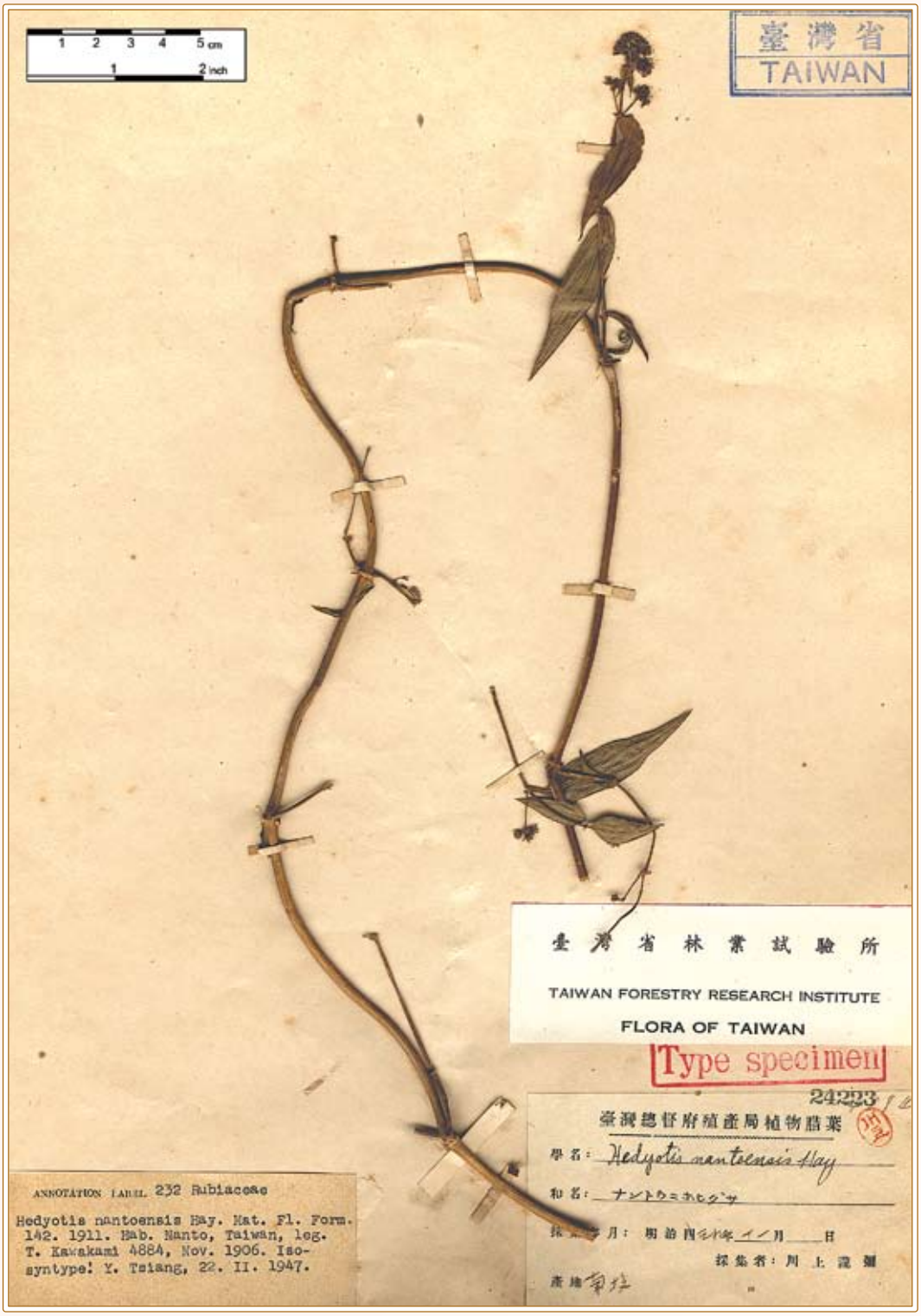
[2)] Leg. *T. Kawakami*, (No. 4883); collection date unrecorded (Hayata 1911).



Hedyotis nantoensis Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):142. 1911. Syntype.[1)] Taiwan, Nanto. *T. Kawakami s. n.*, Nov 1906[2)] (TAIF 24222).

[1)] Sasaki (1930) listed it as a type.

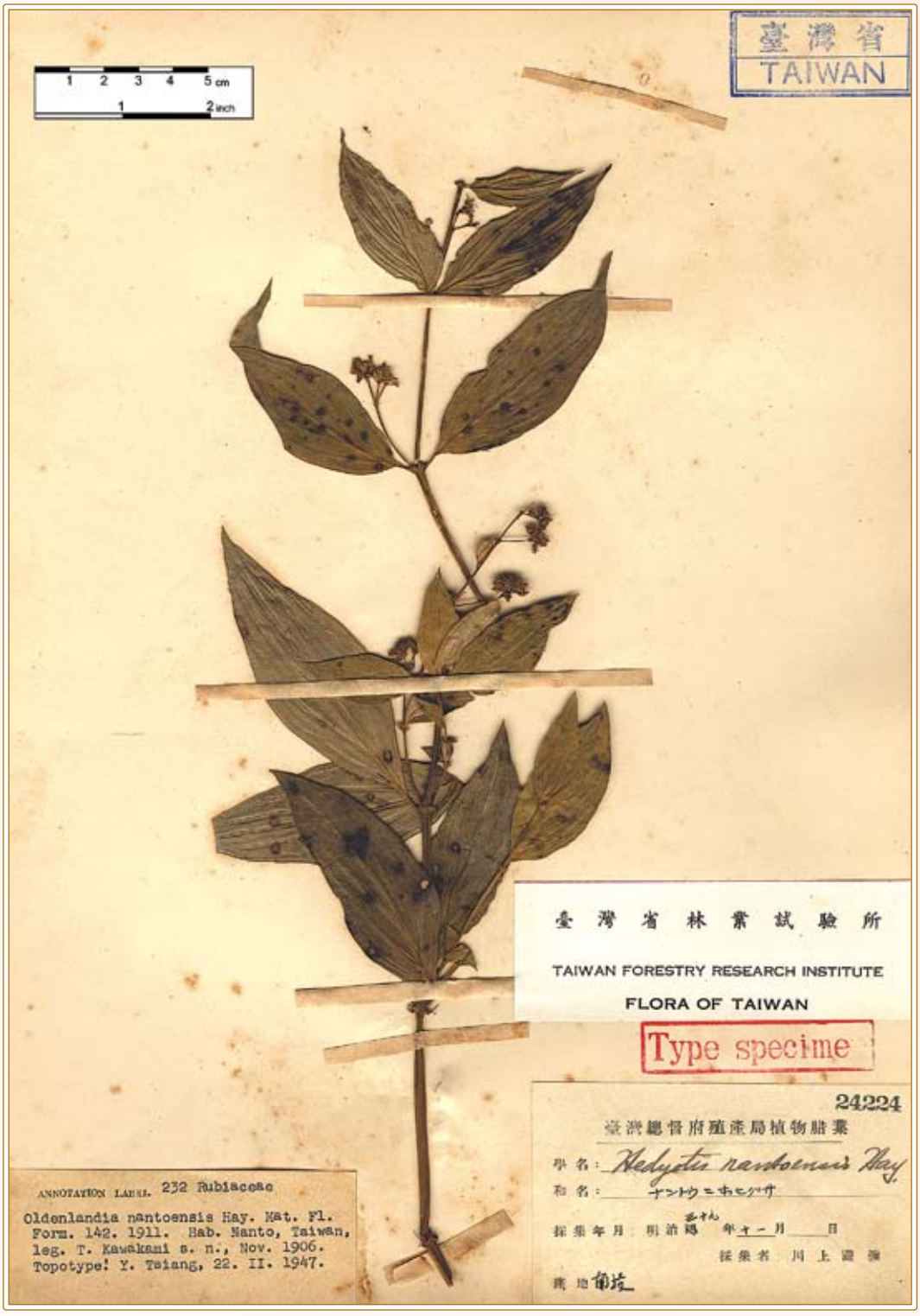
[2)] Leg. *T. Kawakami*, (No. 4883); collection date unrecorded (Hayata 1911).



Hedyotis nantoensis Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):142. 1911. Syntype.[1)] Taiwan, Nanto. *T. Kawakami 4884*, Nov 1906[2)] (TAIF 24223).

[1)] Sasaki (1930) listed it as a type.

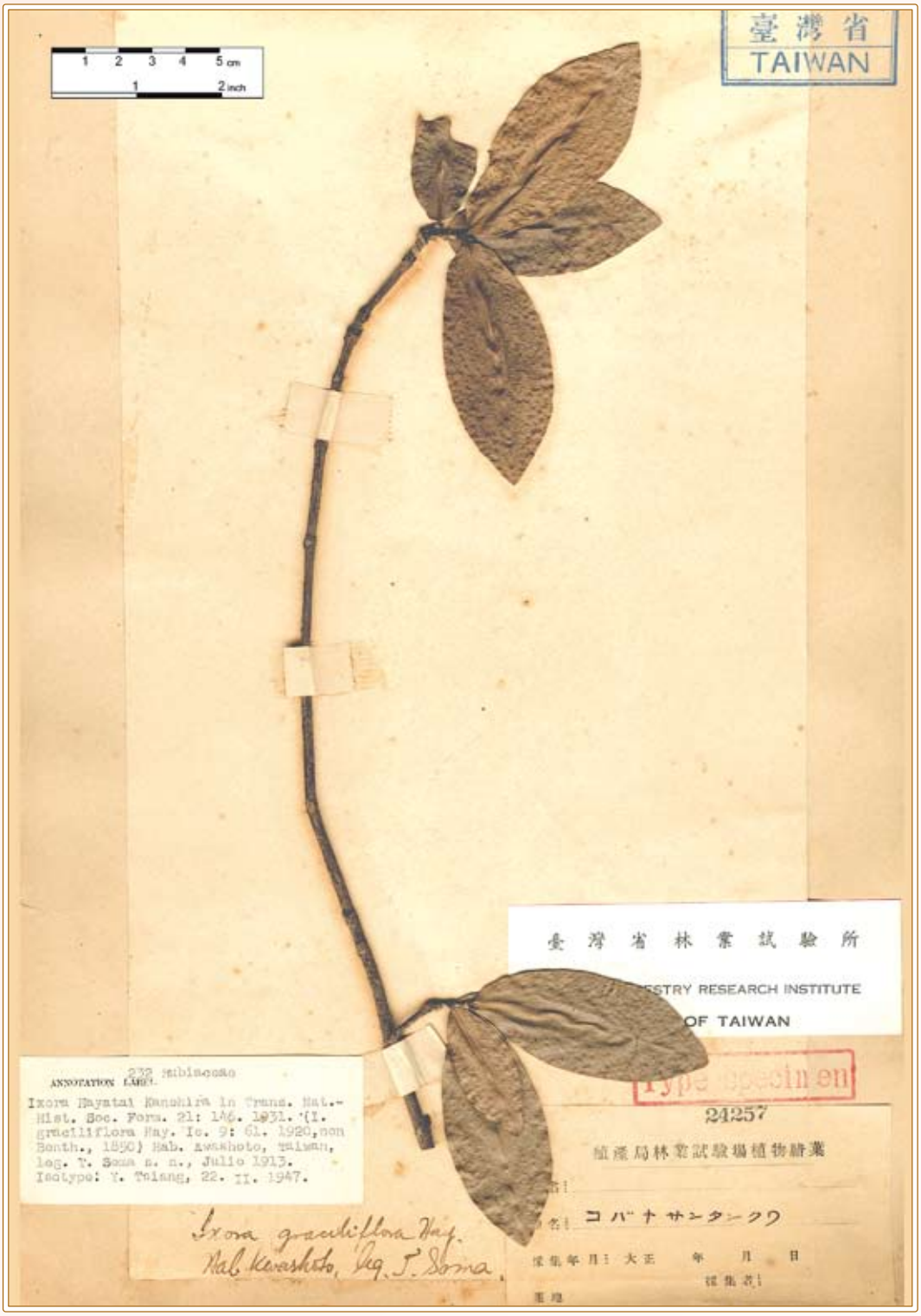
[2)] Leg. *T. Kawakami*, (No. 4883); collection date unrecorded (Hayata 1911).



Hedyotis nantoensis Hayata, J. Coll. Sci. Imp. Univ. Tokyo 30(1):142. 1911. Syntype.[1)] Taiwan, Nanto. *T. Kawakami s. n.*, Nov 1906[2)] (TAIF 24224).

[1)] Sasaki (1930) listed it as a type.

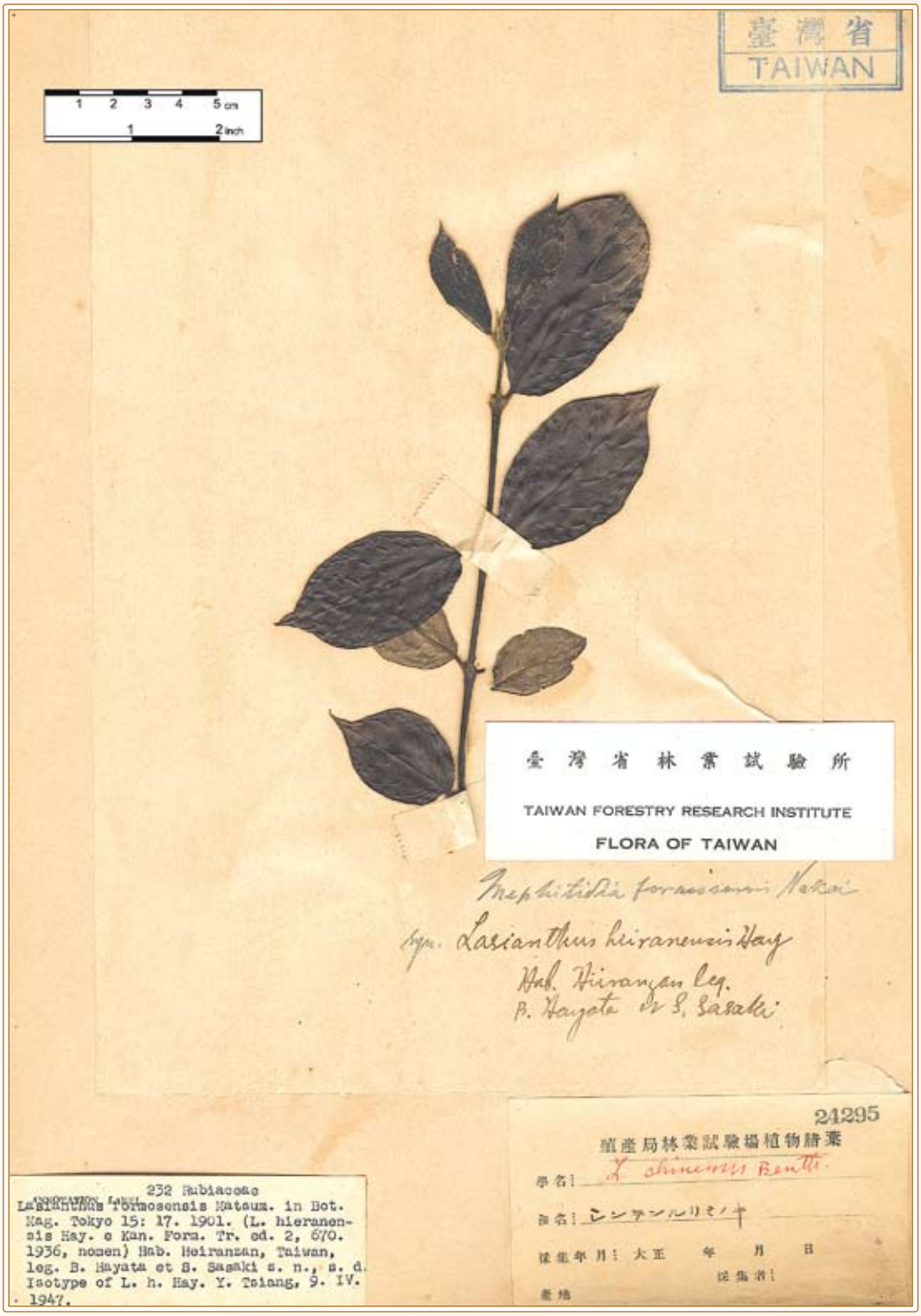
[2)] Leg. *T. Kawakami*, (No. 4883); collection date unrecorded (Hayata 1911).



Ixora graciliflora Hayata, Icon. Pl. Formos. 9:61. 1920. Type.[1)] Taiwan, Kwashoto. *T. Soma s. n., s. d.*[2)] (TAIF 24257).

[1)] Sasaki (1930) listed it as a type.

[2)] July 1913 (Hayata 1920).



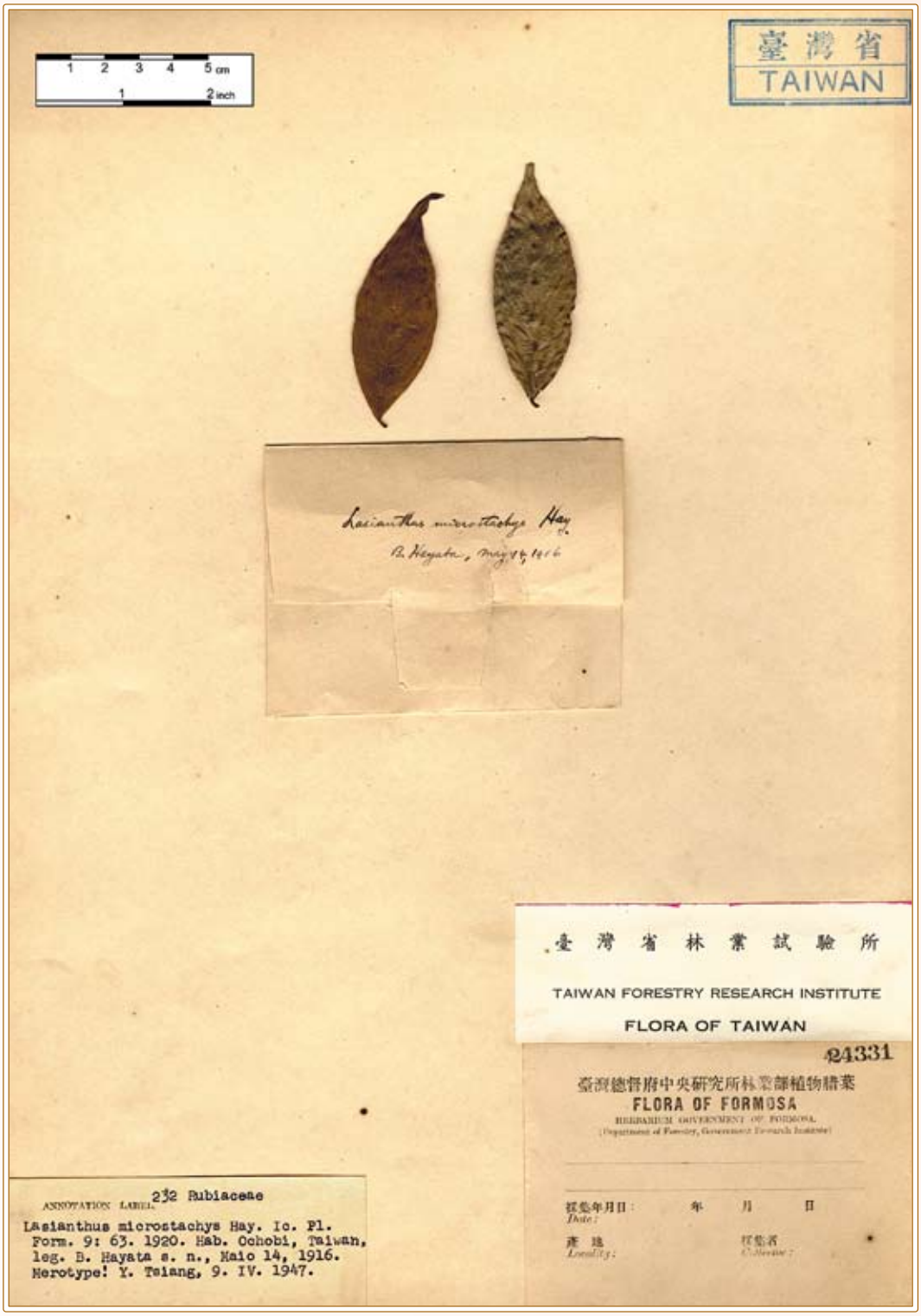
Lasianthus hiiranensis Hayata, Icon. Pl. Formos. 9:62. 1920. Type (part).[1] Taiwan, Hiiranzan. *B. Hayata et S. Sasaki s. n., s. d.*[2] (TAIF 24295).

[1] Sasaki (1930) did not list it as a type, but Y. Tsiang treated it as an isotype on the annotation.

[2] June 1912 (Hayata 1920).



Lasianthus microstachys Hayata, Icon. Pl. Formos. 9:63. 1920. Type (part). Taiwan, Ochobi. *B. Hayata s. n.*, May 1916 (TAIF 24319).



Lasianthus microstachys Hayata, Icon. Pl. Formos. 9:63. 1920. Type (part).[1] *s. loco.*[2] *B. Hayata s. n.*, 14 May 1916[3] (TAIF 24331).

[1] Sasaki (1930) did not list it as a type, but Y. Tsiang treated it as a merotype on the annotation.

[2] Ochobi;

[3] May 1916 (Hayata 1920).

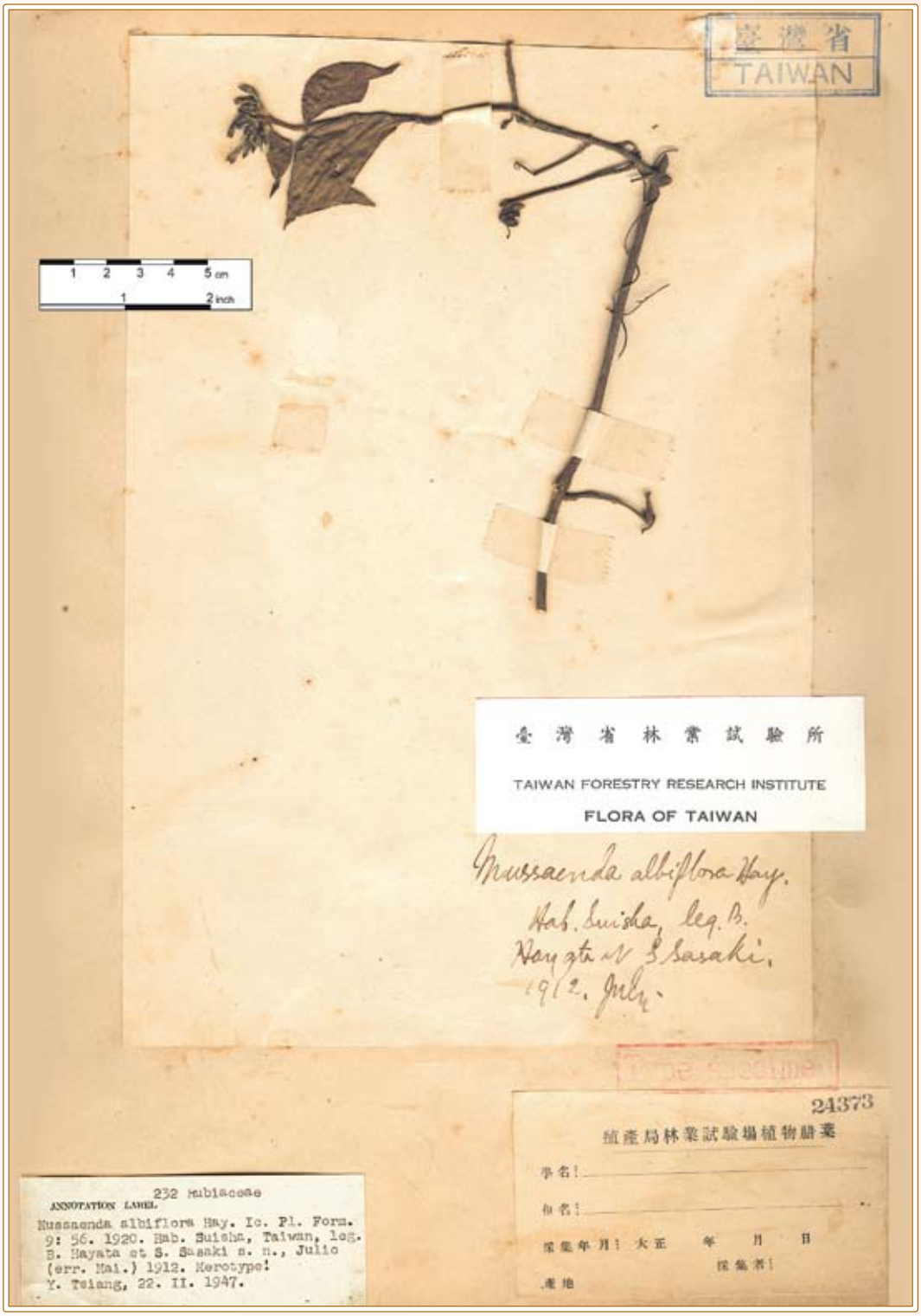


Lasianthus parvifolius Hayata, Icon. Pl. Formos. 9:63. 1920. Type (part).[1)] *s. loco.*[2)] Collector unrecorded, *s. d.*[3)] (TAIF 24297).

[1)] Sasaki (1930) did not list it as a type, but Y. Tsiang conjectured that it was as an isotype on the annotation.

[2)] Arisan: Inter Taroyen *et* Funkiko;

[3)] Leg. *B. Hayata*, Jan 1912 (Hayata 1920).



Mussaenda albiflora Hayata, Icon. Pl. Formos. 9:56. 1920. Type (part).[1)] Taiwan, Suisha. *B. Hayata et S. Sasaki s. n.*, July 1912[2)] (TAIF 24373).

[1)] Sasaki (1930) listed it as a type.

[2)] Leg. *B. Hayata,* May 1912 (Hayata 1920).



Mussaenda taiwaniana Kanehira, Formos. Tr. ed.1:303. 1917; Kanehira in Formos. Tr. ed.2:676. 1936. Syntype. Taiwan, Hori. *R. Kanehira s. n.*, July 1916 (TAIF 24409).



Mussaenda taiwaniana Kanehira, Formos. Tr. ed.1:303. 1917; Kanehira in Formos. Tr. ed.2:676. 1936. Syntype. Taiwan, Hori. *R. Kanehira s. n.*, July 1916 (TAIF 24411).

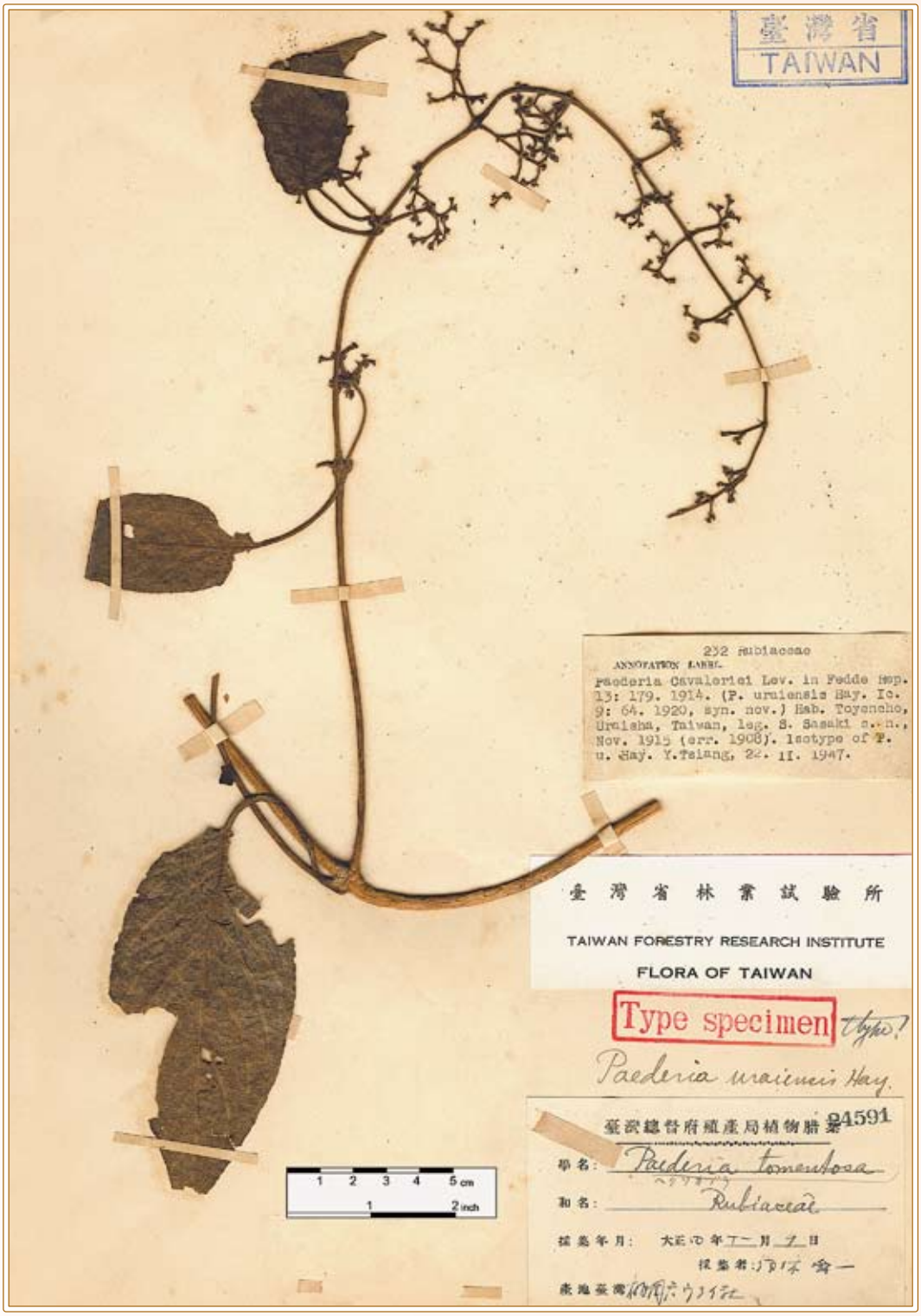


Paederia uraiensis Hayata, Icon. Pl. Formos. 9:64. 1920. Type.[1)] Taiwan, Toyencho, Kappanzan.[2)] *S. Sasaki s. n.*, Nov 1915[3)] (TAIF 24590).

[1)] Sasaki (1930) listed it as a type.

[2)] Toyencho: Uraisha;

[3)] Nov 1908 (Hayata 1920).



Paederia uraiensis Hayata, Icon. Pl. Formos. 9:64. 1920. Type.[1)] Taiwan, Toyencho, Uraisha. *S. Sasaki s. n.*, 9 Nov 1915[2)] (TAIF 24591).

[1)] Sasaki (1930) listed it as a type.

[2)] Nov 1908 (Hayata 1920).



Paederia villosa Hayata, Icon. Pl. Formos. 9:64. 1920. Type.[1)] Taiwan, Kagi, Chuho. *Y. Shimada s. n.*, 14 Sept 1917[2)] (TAIF 24594).

[1)] Sasaki (1930) listed it as a type.

[2)] Sept 1915 (Hayata 1920).

Literature cited

- Chen CH, Wang JC. 2000. *Lomatogonium chilaiensis* (Gentianaceae), a newly recorded genus and new species in Taiwan. Bot Bull Acad Sinica 41(4):323-6.
- Cheng TY, Chang LM, Lin TT. 1982. A list of type specimen in herbarium of Taiwan Forestry Research Institute II. Gymnospermae and Angiospermae. Taipei, Taiwan: Research Bulletin 360 of Taiwan Forestry Research Institute, 32 p.
- Cheng TY, Chang LM, Yang YP, Chang HC. 1980. A list of type specimen in herbarium of Taiwan Forestry Research Institute I. Pteridophyta. Taipei, Taiwan: Research Bulletin 333 of Taiwan Forestry Research Institute, 14 p.
- Chiou WL, Yang KC, Yang YP, Hsu KS, Chen SY. 2000. Type specimens in the herbarium of Taiwan Forestry Research Institute. I. Pteridophyta. Taipei, Taiwan: Taiwan Forestry Research Institute Extension 118:1-92.
- Chu YI, Yamanaka T. 1973. A check list of the present and old name of insect collected localities in Taiwan. Ann Taiwan Mus 16:31-72.
- Chu YI, Yamanaka T. 1975. A check list of the present and old name of insect collected localities in Taiwan (continued). Ann Taiwan Mus 18:121-50.
- Engler A, Diels L. 1936. Syllabus der Pflanzenfamilien. Berlin: Gebruder Borntraeger. 419 p.
- Hayata B. 1906a. Contributions to the alpine flora of Formosa. I. Bot Mag Tokyo 20:13-22.
- Hayata B. 1906b. On a new species of Apocynaceae from Formosa. Bot Mag Tokyo 20:51-2.
- Hayata B. 1908. Flora montana Formosae. J Coll Sci Imp Univ Tokyo 25(19):1-260.
- Hayata B. 1911. Materials for a flora of Formosa. J Coll Sci Imp Univ Tokyo 30(1):1-471.
- Hayata B. 1912. Icones Plantarum Formosanarum. Vol. 2. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 156 p. + XL pl.
- Hayata B. 1913. Icones Plantarum Formosanarum. Vol. 3. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 222 p. + XXXV pl.
- Hayata B. 1914. Icones Plantarum Formosanarum. Vol. 4. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 264 p. + XXV pl.

- Hayata B. 1915. Icones Plantarum Formosanarum. Vol. 5. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 358 p. + XVII pl.
- Hayata B. 1916. Icones Plantarum Formosanarum. Vol. 6. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 168 p. + XX pl.
- Hayata B. 1917. General Index to the Flora of Formosa. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 155 p.
- Hayata B. 1918. Icones Plantarum Formosanarum. Vol. 7. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 107 p. + XIV pl.
- Hayata B. 1919. Icones Plantarum Formosanarum. Vol. 8. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 164 p. + XV pl.
- Hayata B. 1920. Icones Plantarum Formosanarum. Vol. 9. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 155 p. + VII pl.
- Hayata B. 1921. Icones Plantarum Formosanarum. Vol. 10. Taihoku [Taipei], Taiwan: Bureau of Productive Industries. 335 p.
- Huang TC, Hsieh CF, Huang SF, Yang SY. 1993. Localities in Taiwan from specimens of TAI herbarium before 1945. Ann Taiwan Mus 36:117-74.
- Kanehira R. 1917. Formosan trees, an account of trees, shrubs, bamboos, palms and tree ferns, indigenous or commonly cultivated in Formosa. Taihoku [Taipei], Taiwan: Bureau of Productive Industries, Government of Formosa. 648 p.
- Kanehira R. 1930. New species, varieties and combinations of Formosan trees from the Taihoku Herbarium (I). Trans Nat Hist Soc Formos 20:380-4.
- Kanehira R. 1931. New species, varieties and combinations of Formosan trees from the Taihoku Herbarium (II). Trans Nat Hist Soc Formos 21:145-7.
- Kanehira R. 1936. Formosan trees indigenous to the island (revised). Taihoku, Taiwan: Department of Forestry, Government Research Institute. 574 p.
- Kyoda K. 1989. A list of Formosan collection cites appeared in the botanical literature before 1911. J Jpn Bot 64:18-31.
- Li JH, Chen CW, Yang KC, Chung SW, Chiou WL. 2005. Type specimens in the herbarium of the Taiwan Forestry Research Institute. III. Taipei, Taiwan: Taiwan Forestry Research Institute Extension 169:1-219.
- Li JH, Chen CW, Yang KC, Chung SW, Chiou WL. 2006. Type specimens in the herbarium of the Taiwan Forestry Research Institute. IV. Taipei, Taiwan: Taiwan Forestry Research Institute Extension 172:1-213.

- Li JH, Chen CW, Yang KC, Chung SW, Chiou WL. 2007. Type specimens in the herbarium of the Taiwan Forestry Research Institute. V. Taipei, Taiwan: Taiwan Forestry Research Institute Extension 176:1-204.
- Li JH, Yang KC, Chung SW, Chen CW, Chiou WL. 2004. Type specimens in the herbarium of the Taiwan Forestry Research Institute. II. Taipei, Taiwan: Taiwan Forestry Research Institute Extension 165:1-230.
- Li SP, Hsieh TH, Lin CC. 2002. The Genus *Nymphoides* Seguier (Menyanthaceae) in Taiwan. Taiwania 47(4):246-58.
- Liao JC. 1976. Genus *Damnacanthus* in Taiwan. Bull Exp Forest Natl Taiwan Univ 117:133-6.
- Lu SY. 1977. A new species of *Ardisia* in Taiwan. Q J Chin For 10(4):119-21.
- Lu SY. 1985. A new species of *Diospyros* in Taiwan. Q J Chin For 18(2):113-5.
- Lu SY, Yang YP. 1978. A new *Alyxia* for Taiwan. Bot Bull Acad Sin 9(2):195-7.
- Sasaki S. 1928. Miscellaneous contributions to the flora of Formosa, II. Tran Nat Hist Soc Formos 18:209-18.
- Sasaki S. 1930. A catalogue of the government herbarium. Taihoku, Taiwan: Government Research Institute. 592 p.
- Wilson EH, Rehder A. 1921. A Monograph of Azaleas. Cambridge: The University Press. 219 p.



Index of Families and Genera

Species and infraspecies names are under their genus alphabetically and are not indexed.

Alyxia 142
Anodendron 144
Anotis 153
Apocynaceae 142
Ardisia 55
Asclepiadaceae 150
Chimaphila 17
Chionanthus 107
Damnacanthus 154
Diapensiaceae 7
Diospyros 66
Diplospora 155
Ebenaceae 66
Ecdysanthera 145
Embelia 62
Ericaceae 20
Fagraea 128
Fraxinus 109
Galium 161
Gardenia 167
Gentiana 130
Gentianaceae 130
Hedyotis 167
Ixora 172
Jasminum 111
Lasianthus 173
Ligustrum 114
Loganiaceae 128
Lomatogonium 137
Melodinus 146
Mussaenda 177
Myrsinaceae 55
Myrsine 63
Nymphoides 138
Oleaceae 107
Osmanthus 126
Paederia 180
Pieris 20
Pyrola 19
Pyrolaceae 17
Rhododendron 21
Rubiaceae 153
Shortia 7
Styracaceae 76
Styrax 76
Swertia 139
Symplocaceae 78
Symplocos 78
Tylophora 150
Vaccinium 45