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THEOPHRASTUS
ENQUIRY INTO PLANTS

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Translated by
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THEOPHRASTUS

ENQUIRY INTO PLANTS

BOOKS
江苏工业学院图书馆

WITH AN ENGLISH TRANSLATION BY

藏书章
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HARVARD UNIVERSITY PRESS

CAMBRIDGE, MASSACHUSETTS

LONDON, ENGLAND

First published 1916
Reprinted 1948, 1961, 1968, 1990, 1999

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ISBN 0-674-99077-3

*Printed in Great Britain by St Edmundsbury Press Ltd,
Bury St Edmunds, Suffolk, on acid-free paper.
Bound by Hunter & Foulis Ltd, Edinburgh, Scotland.*

PREFACE

THIS is, I believe, the first attempt at an English translation of the 'Enquiry into Plants.' That it should be found entirely satisfactory is not to be expected, since the translator is not, as he should be, a botanist; moreover, in the present state at least of the text, the Greek of Theophrastus is sometimes singularly elusive. I should never have undertaken such a responsibility without the encouragement of that veteran student of plant-lore the Rev. Canon Ellacombe, who first suggested that I should make the attempt and introduced me to the book. It is a great grief that he did not live to see the completion of the work which he set me. If I had thought it essential that a translator of Theophrastus should himself grapple with the difficulties of identifying the plants which he mentions, I must have declined a task which has otherwise proved quite onerous enough. However the kindness and the expert knowledge of Sir William Thiselton-Dyer came to my rescue; to him I not only owe gratitude for constant help throughout; the identifications in the Index of Plants are entirely his work, compared with which the compilation of the Index itself was

PREFACE

but mechanical labour. And he has greatly increased my debt and the reader's by reading the proofs of my translation and of the Index. This is perhaps the place to add a note on the translation of the plant-names in the text:—where possible, I have given an English equivalent, though I am conscious that such names as 'Christ's thorn,' 'Michaelmas daisy' must read oddly in a translation of a work written 300 years before Christ; to print Linnean binary names would have been at least equally incongruous. Where an English name was not obvious, although the plant is British or known in British gardens, I have usually consulted Britten and Holland's Dictionary of Plant-names. Where no English equivalent could be found, *i.e.* chiefly where the plant is not either British or familiar in this country, I have either transliterated the Greek name (as *arakhidna*) or given a literal rendering of it in inverted commas (as 'foxbrush' for *άλωπέκουρος*); but the derivation of Greek plant-names being often obscure, I have not used this device unless the meaning seemed to be beyond question. In some cases it has been necessary to preserve the Greek name and to give the English name after it in brackets. This seemed desirable wherever the author has apparently used more than one name for the same plant, the explanation doubtless being that he was drawing on different local authorities; thus *κέρασος* and *λακάρη* both probably represent 'bird-cherry,' the latter being the Macedonian name for the tree.

PREFACE

Apart from this reason, in a few places (as 3.8.2 ; 3.10.3.) it seemed necessary to give both the Greek and the English name in order to bring out some particular point. On the other hand one Greek name often covers several plants, e.g. λωτός; in such cases I hope that a reference to the Index will make all clear. Inverted commas indicate that the rendering is a literal translation of the Greek word; the identification of the plant will be found in the Index. Thus φελλόδρυς is rendered 'cork-oak,' though 'holm-oak' would be the correct rendering,—cork-oak (*Quercus Suber*) being what Theophrastus calls φελλός, which is accordingly rendered cork-oak without commas. As to the spelling of proper names, consistency without pedantry seems unattainable. One cannot write names such as Arcadia or Alexander otherwise than as they are commonly written; but I cannot bring myself to Latinise a Greek name if it can be helped, wherefore I have simply transliterated the less familiar names; the line drawn must of course be arbitrary.

The text printed is in the main that of Wimmer's second edition (see Introd. p. xiv). The textual notes are not intended as a complete apparatus criticus; to provide a satisfactory apparatus it would probably be necessary to collate the manuscripts afresh. I have had to be content with giving Wimmer's statements as to MS. authority; this I have done wherever any question of interpretation depended on the reading; but I have not thought it necessary to record mere

PREFACE

variations of spelling. Where the textual notes go beyond bare citation of the readings of the MSS., Ald., Gaza, and Pliny, it is usually because I have there departed from Wimmer's text. The references to Pliny will, I hope, be found fairly complete. I am indebted for most of them to Schneider, but I have verified these and all other references.

I venture to hope that this translation, with its references and Index of Plants, may assist some competent scholar-botanist to produce an edition worthy of the author.

Besides those already mentioned I have to thank also my friends Professor D'Arcy Thompson, C.B., Litt.D. of Dundee, Mr. A. W. Hill of Kew, Mr. E. A. Bowles for help of various kinds, and the Rev. F. W. Galpin for his learned exposition of a passage which otherwise would have been dark indeed to me—the description of the manufacture of the reed mouth-pieces of wood-wind instruments in Book IV. Sir John Sandys, Public Orator of Cambridge University, was good enough to give me valuable help in matters of bibliography.

INTRODUCTION

I.—BIBLIOGRAPHY AND ABBREVIATIONS USED

A. *Textual Authorities*

WIMMER divides the authorities on which the text of the *περὶ φύτῶν ἱστορία* is based into three classes:—

First Class :

U. Codex Urbinas: in the Vatican. Collated by Bekker and Amati; far the best extant MS., but evidently founded on a much corrupted copy. See note on 9. 8. 1.

P₂. Codex Parisiensis: at Paris. Contains considerable excerpts; evidently founded on a good MS.; considered by Wimmer second only in authority to U.

(Of other collections of excerpts may be mentioned one at Munich, called after Pletho.)

Second Class :

M (M₁, M₂). Codices Medicei: at Florence. Agree so closely that they may be regarded as a single MS.; considered by Wimmer much inferior to U, but of higher authority than Ald.

INTRODUCTION

- P. Codex Parisiensis : at Paris. Considered by Wimmer somewhat inferior to M and V, and more on a level with Ald.
- mP. Margin of the above. A note in the MS. states that the marginal notes are not *scholia*, but *variae lectiones aut emendationes*.
- V. Codex Vindobonensis : at Vienna. Contains the first five books and two chapters of the sixth; closely resembles M in style and readings.

Third Class :

- Ald. Editio Aldina : the *editio princeps*, printed at Venice 1495-8. Believed by Wimmer to be founded on a single MS., and that an inferior one to those enumerated above, and also to that used by Gaza. Its readings seem often to show signs of a deliberate attempt to produce a smooth text: hence the value of this edition as witness to an independent MS. authority is much impaired.
- (Bas. Editio Basiliensis : printed at Bâle, 1541. A careful copy of Ald., in which a number of printer's errors are corrected and a few new ones introduced (Wimmer).
- Cam. Editio Camotiana (or Aldina minor, altera): printed at Venice, 1552. Also copied from Ald., but less carefully corrected than Bas.; the editor Camotius, in a few passages,

INTRODUCTION

altered the text to accord with Gaza's version.)

G. The Latin version of Theodore Gaza,¹ the Greek refugee: first printed at Treviso (Tarvisium) in 1483. A wonderful work for the time at which it appeared. Its present value is due to the fact that the translation was made from a different MS. to any now known. Unfortunately however this does not seem to have been a better text than that on which the Aldine edition was based. Moreover Gaza did not stick to his authority, but adopted freely Pliny's versions of Theophrastus, emending where he could not follow Pliny. There are several editions of Gaza's work: thus

G.Par.G.Bas. indicate respectively editions published at Paris in 1529 and at Bâle in 1534 and 1550. Wimmer has no doubt that the Tarvisian is the earliest edition, and he gives its readings, whereas Schneider often took those of G.Bas.

Vin.Vo.Cod.Cas. indicate readings which Schneider believed to have MS. authority, but which are really anonymous emendations from the margins of MSS. used by his predecessors, and all, in Wimmer's opinion

¹ See Sandys, *History of Classical Scholarship*, ii. p. 62, etc.

INTRODUCTION

traceable to Gaza's version. Schneider's so-called Codex Casauboni he knew, according to Wimmer, only from Hofmann's edition.

B. Editions

H. Editio Heinsii, printed at Leyden, 1613: founded on Cam. and very carelessly printed, repeating the misprints of that edition and adding many others. In the preface Daniel Heins¹ pretends to have had access to a critical edition and to a Heidelberg MS.; this claim appears to be entirely fictitious. The book indeed contains what Wimmer calls a *farrago emendationum*; he remarks that 'all the good things in it Heinsius owed to the wit of others, while all its faults and follies we owe to Heinsius.' Schneider calls it *editio omnium pessima*.

Bod. Editio Bodaei (viz. of Joannes Bodaeus à Stapel), printed at Amsterdam, 1644. The text of Heinsius is closely followed; the margin contains a number of emendations taken from the margin of Bas. and from Scaliger, Robertus Constantinus, and Salmasius, with a few due to the editor himself. The commentary, according to Sir William Thiselton-Dyer, is 'botanically monumental and fundamental.'

¹ See Sandys, *op. cit.* p. 313 etc.

INTRODUCTION

St. Stackhouse, Oxford, 1813: a prettily printed edition with some illustrations; text founded on Ald. The editor seems to have been a fair botanist, but an indifferent scholar, though occasionally he hits on a certain emendation. The notes are short and generally of slight value. The book is however of interest, as being apparently the only work on the 'Enquiry' hitherto published in England.

Sch. J. G. Schneider (and Linck), Leipzig: vols. i.-iv. published in 1818, vol. v. in 1821; contains also the *περὶ αἰτιῶν* and the fragments, and a reprint of Gaza's version (corrected). The fifth, or supplementary, volume, written during the author's last illness, takes account of the Codex Urbinas, which, unfortunately for Schneider, did not become known till his edition was finished. It is remarkable in how many places he anticipated by acute emendation the readings of U. The fifth volume also gives an account of criticisms of the earlier volumes by the eminent Greek Adamantios Koraës¹ and Kurt Sprengel. This is a monumental edition, despite the verbosity of the notes, somewhat careless references and reproduction of the MSS. readings, and an imperfect comprehension of the compressed style of Theophrastus, which leads to a good deal of wild emendation or rewriting of the text. For the first time we find an attempt at

¹ See Sandys, *op. cit.* iii. pp. 361 foll.

INTRODUCTION

providing a critical text, founded not on the Aldine edition, but on comparison of the manuscripts then known; the Medicean and Viennese had been collated a few years before by J. Th. Schneider. We find also full use made of the ancient authors, Athenaeus, Plutarch, Pliny, Dioscorides, Nicander, Galen, etc., who quoted or adapted passages of Theophrastus, and copious references, often illuminating, to those who illustrate him, as Varro, Columella, Palladius, Aelian, the *Geoponica*.

Spr. Kurt Sprengel, Halle, 1822. This is not an edition of the text, but a copious commentary with German translation. Sprengel was a better botanist than scholar; Wimmer speaks disparagingly of his knowledge of Greek and of the translation. (See note prefixed to the Index of Plants.)

W Fr. Wimmer: (1) An edition with introduction, analysis, critical notes, and Sprengel's identifications of the plant-names; Breslau, 1842.

(2) A further revised text with new Latin translation, apparatus criticus, and full indices; the Index Plantarum gives the identifications of Sprengel and Fraas; Didot Library, Paris, n.d.

(3) A reprint of this text in Teubner's series, 1854.

These three books are an indispensable supplement to Schneider's great work. The notes in the edition of

INTRODUCTION

1842 are in the main critical, but the editor's remarks on the interpretation of thorny passages are often extremely acute, and always worth attention. The mass of material collected by Schneider is put into an accessible form. Wimmer is far more conservative in textual criticism than Schneider, and has a better appreciation of Theophrastus' elliptical and somewhat peculiar idiom, though some of his emendations appear to rest on little basis. A collation of the Paris MSS. (P and P₂) was made for Wimmer; for the readings of U and M he relied on Schneider, who, in his fifth volume, had compared U with Bodaeus' edition. A fresh collation of the rather exiguous manuscript authorities is perhaps required before anything like a definitive text can be provided. Wimmer's Latin translation is not very helpful, since it slurs the difficulties: the Didot edition, in which it appears, is disfigured with numerous misprints.

(Sandys' *History of Classical Scholarship* (ii. p. 380) mentions translations into Latin and Italian by Bandini; of this work I know nothing.)

C. Other Commentators

Scal. J. C. Scaliger: *Commentarii et animalversiones* on the *περὶ φυτῶν ἱστορία* posthumously published by his son Sylviüs at Leyden, 1584. (He also wrote a commentary on the *περὶ αἰτιῶν*, which was edited by Robertus Cónstantinus and pub-

INTRODUCTION

lished at Geneva in 1566.) The most accurate and brilliant scholar who has contributed to the elucidation of Theophrastus.

R.Const. Robertus Constantinus (see above). Added notes of his own, many of them valuable, which are given with Scaliger's in Bodaeus' edition.

Salm. Salmasius (Claude de Saumaise). Made many happy corrections of Theophrastus' text in his *Exercitationes Plinianae*.

Palm. Jacobus Palmerius (Jacques de Paulmier). His *Exercitationes in optimos auctores Graecos* (Leyden, 1668) contain a certain number of acute emendations; Wimmer considers that he had a good understanding of Theophrastus' style.

Meurs. Johannes Meursius (Jan de Meurs). Author of some critical notes on Theophrastus published at Leyden in 1640; also of a book on Crete.

Dalec. Jean Jacques D'Aléchamps: the botanist. Author of *Historia plantarum universalis*, Lyons, 1587, and editor of Pliny's *Natural History*.

Mold. J. J. P. Moldenhauer. Author of *Tentamen in Historiam plantarum Theophrasti*, Hamburg, 1791. This book, which I have not been able to see and know only from Wimmer's citations, contains, according to him, very valuable notes on the extremely difficult Introduction to the 'Historia' (Book I. chaps. i.-ii.).

INTRODUCTION

II.—THEOPHRASTUS' LIFE AND WORKS

Such information as we possess concerning the life of Theophrastus comes mainly from Diogenes Laertius' *Lives of the Philosophers*, compiled at least four hundred years after Theophrastus' death; it is given therefore here for what it may be worth; there is no intrinsic improbability in most of what Diogenes records.

He was born in 370 B.C. at Eresos in Lesbos; at an early age he went to Athens and there became a pupil of Plato. It may be surmised that it was from him that he first learnt the importance of that principle of classification which runs through all his extant works, including even the brochure known as the 'Characters' (if it is rightly ascribed to him), and which is ordinarily considered as characteristic of the teaching of his second master Aristotle. But in Plato's own later speculations classification had a very important place; since it was by grouping things in their 'natural kinds' that, according to his later metaphysic, men were to arrive at an adumbration of the 'ideal forms' of which these kinds are the phenomenal counterpart, and which constitute the world of reality. Whether Theophrastus gathered the principle of classification from Plato or from his fellow-pupil Aristotle, it appears in his hands to have been for the first time systematically applied to the vegetable world. Throughout his botanical

INTRODUCTION

works the constant implied question is 'What is its *difference*?', 'What is its essential nature?', viz. 'What are the characteristic features in virtue of which a plant may be distinguished from other plants, and which make up its own 'nature' or essential character?'

Theophrastus appears to have been only Aristotle's junior by fifteen years. On Plato's death he became Aristotle's pupil, but, the difference in age not being very great, he and his second master appear to have been on practically equal terms. We are assured that Aristotle was deeply attached to his friend; while as earnest of an equally deep attachment on the other side Theophrastus took Aristotle's son under his particular care after his father's death. Aristotle died at the age of sixty-three, leaving to his favourite pupil his books, including the autographs of his own works, and his garden in the grounds of the Lyceum. The first of these bequests, if the information is correct, is of great historical importance; it may well be that we owe to Theophrastus the publication of some at least of his master's voluminous works. And as to the garden it is evident that it was here that the first systematic botanist made many of the observations which are recorded in his botanical works. Diogenes has preserved his will, and there is nothing in the terms of this interesting document to suggest that it is not authentic. Of special interest is the provision made for the maintenance of the garden;