

*THE OLIVE-TREE AND THE WILD-OLIVE.*

II.

THE slight account given in the first part of this paper of the importance of the Olive-tree in the economy of an Olive-growing country brings into clear relief the meaning of many passages in the Bible. Only one of these will be touched on here. When in Rev. vi. 5 f. the rider on the black horse, who symbolizes famine resulting from invasion, goes forth, there is announced scarcity, with dearness of wheat and barley, but the oil and the wine are not to be injured. The standing crops shall be wasted by the Parthian invaders, but the fruit-trees shall not suffer. The raid shall be a passing one, and shall not do permanent and lasting destruction. The land shall be able to recover with the coming of the next summer harvest, according to the facts stated above, p. 29 ff.

In view of modern opinion it is advisable before concluding to say a word about the Wild-Olive. So far as ancient literature is concerned there is no special need of much explanation. The ancients clearly distinguish between two trees—the cultivated Olive-tree, and another which is always regarded as different in kind, called *κότινος* in Greek and *oleaster* in Latin, ordinarily and (as I believe) rightly rendered Wild-Olive by modern students of ancient literature. As was pointed out in the first part of this article, p. 17 f., these are mentioned separately in lists of different trees; they were regarded as different and distinct in kind; and they were sacred to different deities. Zeus was the god to whom the Wild-Olive was sacred; but Pallas Athenaia presided over the cultivation of the Olive, she produced the tree from the ground, and the Olive-garland was the symbol of her worship. In the following remarks the term Wild-Olive is used to designate the tree

which was called by the ancients *κότινος* and *oleaster*. The ordinary unscientific, yet not unobservant, traveller,<sup>1</sup> or the ordinary inhabitant of the Olive-growing districts of Asia Minor, would have no doubt as to what tree is meant by these terms: he is familiar with both: they are both extremely common, yet different in appearance and character. He cannot doubt that these two trees would both be frequently mentioned by the ancients, and would be regarded by them as separate and distinct kinds of trees. It is a totally different case from that of the Wild-Fig: this is a false name, a mere expression of ignorance, denoting the male Fig-tree (called *ἐπίνεος* by the Greeks, and *caprificus* by the Latins).<sup>2</sup>

It is different when one comes to investigate modern opinion on the subject. Then one is involved in endless difficulties and differences of opinion, amid which it is extremely hard to pick and choose.

There is a great deal of misapprehension about the

<sup>1</sup> Throughout these articles I have been indebted to the observant eyes and retentive memory of my wife for such facts, though she must not be held responsible for any mistakes I may make.

<sup>2</sup> The Wild-Fig tree, or Male Fig, is in appearance exactly like the Fig-tree, so far as the ordinary person can detect. It very often grows in walls or stony places. The fruit is smaller, and drops off about two months before the edible figs ripen. This fruit is full of dust and flies; the flies carry the dust to fertilize the edible figs. I have been told in Asiatic Turkey that unless fertilized by this dust or pollen the figs do not ripen; but I believe that this is not strictly correct. The statements made by some modern writers that ripe figs can be found on the trees for many months—statements which so far as I know are quite incorrect—perhaps originate from a confusion between the two kinds of fig. Canon Tristram says that in the hot and low lands beside the Dead Sea the figs are ripe during most part of the year. Whether this be true or not, it does not affect the case of the barren Fig-tree mentioned in Matthew xxi., Mark xi., which was nearly 4,000 feet above the Dead Sea, where no person could dream of finding fruit at Easter. That incident is one of the most difficult in the New Testament; and nothing that has been written about it seems of any value; but I am not prepared to offer any opinion. I do not see the way open to any explanation of the difficulty, whether in the way of moral teaching or of erroneous popular mythology affecting in this case the Gospels. The passage is to me utterly obscure.

relation between the Olive and the Wild-Olive. As a general rule recent writers in English seem to have missed the truth owing to the erroneous idea that a much closer similarity exists between these two trees than is really the case. It would almost seem as if many of them thought that the Wild-Olive is simply an ordinary Olive-tree in its natural state before it is grafted, and that it is made into a true Olive by the process of grafting. That is erroneous, as Mr. W. M. Thomson recognizes, in the book which we have often quoted with admiration above. So much I think it is quite safe to say, though I may not be able to state the facts as I have seen them without falling into mistakes due to unscientific habits of mind and the inevitable inaccuracy of the mere untrained observer.

The Wild-Olive is a distinct kind of tree, which even the superficial observer would not mistake for the true Olive. It bears small fruit, which produces little oil ; it has ovate leaves of a greener colour than the grey Olive-tree ; these leaves are not so pointed and lancet-shaped as those of the Olive ; the bark is smoother, and the twigs are thorny and more square in section, whereas the Olive has no thorns and the twigs are round. The Wild-Olive is usually only a bush, which grows very widely in all those parts of the Mediterranean world that I am acquainted with (except Egypt) ; it grows in many regions where the cultivated Olive-tree is now unknown ; and it grows abundantly in regions so high and inclement that the cultivated Olive could never have existed in them. Where the Wild-Olive has room and good soil, however, it grows to be a considerable tree, as is mentioned below ; and its wood is tough, hard, and useful.

The *kotinos* is never mentioned by Homer ; and, considering the importance in Greece of the tree alike in religion and in wide diffusion, this is strange. It is, however, probable that in some cases, where he speaks of the Olive-tree,

*ἐλαία*, he means *κότινος*; and Prof. Th. Fischer seems to hold this opinion (unless he has made a mere slip, for he says that the marriage-bed which Ulysses constructed in his palace was made in the stem of a Wild-Olive, but Homer uses the name *ἐλαία* for that large tree (*Odyssey*, xxiii. 190 ff.). The description, certainly, suggests a Wild-Olive rather than an Olive.

The ancients were quite familiar, as might be expected, with the difference between the *kotinos* and the cultivated Olive; for Theophrastus, in his *History of Plants*, II. 3, states the principle that the *kotinos* can never develop into a true Olive-tree. This seems to imply that the ancients did not graft the true Olive shoot on the *kotinos*, though the modern cultivators in France and Spain, as well as in Greece and the islands of the Ægean Sea, often do so: yet Origen says that the process was common in his time, but (as we saw) Origen is probably speaking not from personal knowledge.

The relation of the true Olive to the Wild-Olive is very far from certain; the most diverse and very contradictory opinions are stated, sometimes with diffidence, sometimes with unhesitating confidence, by different modern authorities; and it is extremely difficult to know what to believe. While the appearance of the two kinds of tree is very different, yet the fact is indubitable that a Wild-Olive stock, grafted with a shoot from the cultivated Olive, produces a good and productive true Olive-tree. The two species are certainly very close to one another; and it is quite possible that to the scientific mind they may be much more nearly akin than they seem to the ordinary unscientific observer.

The young Olive-tree is, in course, selected from a good stock, and is a true Olive from the beginning. It is, however, the case that the true Olive can be obtained by grafting a noble scion on a Wild-Olive, and this pro-

cess has been frequently employed in modern time in the Mediterranean, where groves of Wild-Olive have thus been utilized on a large scale. But, where cultivation is long settled and Olives are planted and tended from the beginning, the young stock is noble; and this beyond all doubt was the regular ancient practice.

This leads up to a misapprehension, into which Canon Tristram has fallen in his *Natural History of the Bible*, p. 377, and which has been commonly repeated on his authority by English writers subsequently (e.g. by Messrs. Sanday and Headlam in their commentary). Canon Tristram asserts that there are three different kinds of Olive: (1) the ungrafted tree, which is the natural or Wild Olive, ἀγριέλαιος; (2) the grafted tree, the cultivated tree, ἐλαία; (3) the oleaster, "a plant of a different natural order" (Sanday and Headlam), which "has no relationship to the Olive" (Tristram), yielding inferior oil, bearing long, narrow, bluish leaves, viz., the bush or small tree called *Eleagnus angustifolia*.

There is just sufficient resemblance to the truth in this account to make it peculiarly dangerous. The ungrafted Olive is, of course, different from the grafted tree; and it would in its natural ungrafted condition produce inferior fruit, containing little oil. That is the almost universal rule among cultivated fruit-trees: they must be grafted to produce well.<sup>1</sup> But this natural ungrafted Olive-tree is not ἀγριέλαιος, and is not the tree which St. Paul here has in mind.

Canon Tristram does not mention the Greek name for the shrub, which he identifies with his oleaster. He could hardly avoid the view that the Greek κότινος is the Latin oleaster; but if he stated that, he would be face to face with a serious difficulty. Many Greek authorities<sup>2</sup> say

<sup>1</sup> The fig-tree is one of the few exceptions. It may be grafted, but grows quite well from shoots alone.

<sup>2</sup> Suidas, Hesychius, Etym., Dioscorides, I. 136, Pollux, I. 241, Schol. Theocr. V. 32, etc.

that *κότινος* and *ἀγριέλαιος* denote the same tree, and most add that *κότινος* is the name used in the Attic dialect. There can be no doubt that this tree is the Wild-Olive, oleaster in Latin; and the Latin version of Origen states that this was the ground-stock on which the true Olive was grafted (an erroneous statement as regards Egypt, but correct in regard to some places).

It is, as Fischer says, still a matter of dispute among botanists whether the cultivated Olive and the Wild-Olive (*Oleaster*) are entirely distinct species, or whether the Wild-Olive is only the original and natural tree out of which the Olive has been gradually developed by generations of cultivation: or, thirdly, whether the Wild-Olive is the form into which any ordinary specimen of cultivated Olive degenerates when it is left neglected for a long time.

Professor Fischer, p. 4 f., who takes no notice of the second alternative, but only discusses the question between the first and third alternatives, inclines to the view that Olive and Oleaster are quite distinct, though he admits that the grafting of the true Olive on the *Oleaster* produces a perfectly good productive Olive-tree. Though I have no claim to be a scientific observer, yet one argument, which Professor Fischer does not notice, seems to me conclusive against his view. This argument was stated to me by the late Mr. George Dennis, author of that excellent book *Cities and Cemeteries of Etruria*, whom I had the advantage of knowing well about 1880 to 1882, when he was H.B.M. Consul in Smyrna. Mr. Dennis was an extremely accurate observer, and his great book derives its value from its trustworthiness and accuracy, not from learned theories or ingenious combinations. Moreover, he was familiar for many years with Spain, Italy, and Sicily; and he had travelled widely in the Greek world. He said that in the neighbourhood of Cyrene, where he had travelled and excavated, the cultivated Olive no longer exists, but the

Wild-Olive abounds; and since Cyrene was once rich in Olives, he inferred that the Olive, when left uncared for during many centuries, went back to its original and natural condition as a Wild-Olive.

If this observation is correct, it seems to demonstrate that, when the cultivated Olive is left uncared for during a series of generations, it gradually relapses into a form which is closely similar to the Wild-Olive or Oleaster (though I am assured that probably a scientific observer would find differences, proving that the line of descent had been modified by generations of cultivation); and the easy explanation of this appears to be that the Wild-Olive or *κότινος* is very closely akin in descent to the original natural tree out of which the cultivated Olive was developed by generations of care.

On the other hand Professor Fischer, p. 5, quotes Von Heldreich, who in a letter written from Athens in 1882 declares that the Olive in countries like Barka (the district of Cyrene), where it has been uncultivated for so many centuries, does not degenerate into a Wild-Olive, but remains a true Olive, though becoming poorer and less productive. This statement does not seem to rest on observation, but on theory. It cannot be denied that the Wild-Olive is abundant all over the Cyrenaica; and Professor Fischer's account of the Cyrenaica, p. 69, is hardly consistent with Von Heldreich's words, though he does indeed quote some allusion to true Olives still surviving in small numbers there.

The facts are that (1) the Wild-Olive, when properly grafted with the nobler shoot, gives rise to the true Olive (though of course when ungrafted it can, as Theophrastus says, never become a true Olive): see examples in Fischer p. 5. (2) The cultivation of the Olive, which originated in Western Asia several thousand years ago, has produced a well-marked difference in the tree. (3) The Olive, if

neglected, would naturally revert to the primitive type in the course of centuries, though not completely so, for it would still retain distinguishable traces of the cultivated tree; and thus both Mr. Dennis and Von Heldreich may be correct in their statements about the Cyrenaica, from different points of view. (4) A shoot of the finest cultivated Olive, if planted, will not grow into a good and productive Olive unless it is grafted just like a Wild-Olive. The essential and indispensable fact is everywhere and in all cases the grafting of the young tree. (5) The ordinary practice in the Levant regions is to plant shoots of the cultivated Olive, and not to graft the Wild-Olive.

The conclusion is unavoidable that the Wild-Olive or Oleaster is the tree here referred to by St. Paul and contrasted with the true Olive, which is essentially a cultivated tree. It may be indeed conceded to Canon Tristram that the ungrafted young tree, even if grown from a noble shoot, may probably have been sometimes loosely called by the Greeks *ἀγριέλαιος*, because it had not yet been ennobled<sup>1</sup>; but this furnishes no proof that such was the regular and ordinary use of that word.

The opinion of Canon Tristram that the *ἀγριέλαιος* is totally distinct from the oleaster of the ancients has been widely adopted by English writers; but there seems to be no authority for it. Several passages in Latin (for example, Virgil, *Georgics*, ii. 182) seem to demonstrate that the Oleaster was the *kotinos* or ordinary Wild-Olive; and in Hastings' *Dictionary of the Bible*, art. "Oil-tree," an argument is advanced about the corresponding tree in Hebrew, which seems to dispose entirely of the proposed identification with *Eleagnus angustifolia*, which is

<sup>1</sup> Theophrastus seems to use *ἀγριος ἐλαία* in this way. Pausani's, II. 32, 10, seems to distinguish three classes of Wild-Olive, *κότινος*, *φυλία*, and *ἀγριέλαιος*; but the best authority on technical matters, Blumner, refuses to pronounce any opinion on the passage. Presumably, the second or the third term was used by Pausanias to indicate the ungrafted tree.



a mere bush and not a real tree. Dr. Post says (iii. 591), "The oleaster [which he assumes to be the *Eleagnus*] never grows large enough to furnish such a block of wood as was required for the image [ten cubits high, to be placed in the Holy of Holies]. It is also never used for house carpentry." These statements are doubtless quite true in the modern state of the country : Dr. Post is a thoroughly satisfactory authority for what comes in the range of his experience in the present time. But the Oleaster or Wild-Olive (Greek *κότινος*, *ἀγριέλαιος*) was far more widely used and more useful in ancient times. It grew sometimes then, and grows sometimes still, to be a stately tree, though generally it is only a bush ten to fourteen feet high. Professor Theobald Fischer, one of the leading authorities of the day, mentions that it grows in suitable circumstances to a height of fifty to seventy feet and forms large forests.

In this difficult subject, in regard to which I find hardly any statement made by any authority which is not flatly contradicted by some other equally great authority, I cannot hope to have avoided error. I have no botanical training ; and when I was in Asia Minor, I had never any occasion to pay attention to Olive cultivation, but merely picked up by chance some information. I shall be grateful for correction and criticism.

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