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Plants in the New Testament

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The New Testament is rich in botany and agriculture. Nearly a hundred verses of the New Testament speak of plants or use agricultural terms. More than twenty different plant taxa are mentioned by name, and the text abounds with references to plant parts and products such as seeds, branches, flowers, and oil. The Savior and New Testament writers regularly used botanical and agricultural imagery to illustrate and teach their messages. This study will therefore discuss plants and botanical terms mentioned in the New Testament in an effort to help modern readers better understand life during New Testament times and the teachings of the text.

Biblical botany has generated a considerable corpus of research and much debate in academia over the years. Michael Zohary, the renowned botanist of the Near East, summarized the challenges faced by the discipline when he observed that "owing to inadequate knowledge of the native plants and the tendency, in dubious cases, to assign to the plants of the Bible names familiar to the translators, inaccuracies and confusion abound in the translations."[1] Accordingly, in this study of New Testament plants and botanical terms, I will not attempt to give a thorough review of the debates over the identity and proper translation of each plant species or terms discussed. Doing so would require a volume of considerable length. Rather, in dictionary format,[2] I will list and discuss each plant, plant part, or product found in the King James Version of the New Testament, focusing only on the current, most accepted opinions about identification and translation and the botany associated with each. I will then review the context in which each term is used and share insights on how the bot-

any associated with the suggested identification or translation of the term can inform one's understanding of the text in which it is used.[3] Any exegesis that accompanies each entry will largely derive from my own understanding.

KJV Botanical Term

Aloes (*aloē*, ἀλόη, 1x): A plant or plant product that was mixed with myrrh and used for preparing bodies for burial in Jesus's time. Nicodemus brought "about an hundred pound weight" (ca. 75 US pounds) of the mixture to help Joseph of Arimathea prepare the crucified Christ for burial by wrapping the body in linen layered with the "spices" (John 19:38–40). The exact species from which "aloes" were derived has been a matter of debate. Aloe is also mentioned in the Old Testament, typically in the context of being mixed with myrrh to make a desirable fragrance (Song of Solomon 4:14; Proverbs 7:17; Psalm 45:8; compare Numbers 24:6). Most agree the Old Testament aloe is derived from some species of *Aquillaria*, most likely *Aquillaria agallocha*, which is native to East Africa and northern India and commonly known as eaglewood, or perhaps *Santalum album* (sandalwood), which is likewise native to India. Wood and extracts from both species were highly prized for making fragrances. Some feel that because both the Old Testament and New Testament aloes were used in combination with myrrh, they are likely the same species, but most conclude that the New Testament aloe used to prepare the body of Christ was more likely derived from *Aloe succortrina,* a true aloe that is native to the island of Socotra (Arabian Sea), because the oil extracted from the fleshy, succulent leaves of the plant has a long history of use for embalming in ancient Egypt and elsewhere. Being both rare and imported, any of these possible species for the source of the aloes used to prepare Christ's body for interment would have been very costly. The large amount of the precious commodity donated by Nicodemus indicates the respect he must have held for Jesus. Thus, worshipful men offered precious plant products both to welcome Christ into the world and to bid him farewell (Matthew 2:11; John 19:39).

Anise (*anēthon*, ἄνηθον, 1x): A plant tithed in New Testament times. The Greek term translated as "anise" in the KJV likely does not refer to the common anise, *Pimpinella anisum*. Though it is a valuable plant cultivated in temperate climates to be used as a condiment and spice, it does not appear to have been planted in Bible lands during New Testament times. Rather, the Greek *anēthon* more likely refers to the common dill, *Anethum graveolens*. This versatile member of the carrot family has been cultivated in the Levant from Neolithic times and grows wild there as well. Leaves of the plants were, as today, a popular pickling agent, and the aromatic seeds and seed oil were used as a flavoring and medicinally as a carminative. The Talmud requires tithes to be paid on the greens, stems, and pods of dill.[4] Christ endorsed the payment of tithes in "anise" but condemned those who did so as a show of piety while omitting the "weightier matters of the law" such as "judgment [justice], mercy, and faith" (Matthew 23:23).

Barley (*krithē*, κριθή, 3x): A cereal crop domesticated and cultivated since Neolithic times throughout much of the ancient Near East. Barley continues to be an important cereal

crop throughout much of the world today. The most common species of cultivated barley, *Hordeum vulgare*, includes both two-rowed and six-rowed varieties, differentiated by the number of fertile or grain-producing flowers found on the seed spike. Anciently, barley, along with wheat, constituted the primary cereal staples from Egypt through the Levant to Mesopotamia and Asia Minor. Though barley makes inferior flour and bread compared to wheat, being lower in gluten protein, it was still widely grown because it tolerates a much wider range of climates and soil types and ripens much earlier than wheat.

In New Testament times, barley loaves were the common or poor man's fare. Thus, it is not surprising that the peasant "lad," whose donation fed the five thousand, had but five barley loaves of bread (John 6:9, 13), nor that three measures of barely could be purchased for the price of one measure of wheat (Revelation 6:6).

Bramble (*batos*, βάτος, 1x); bush (*batos*, βάτος, 4x): A thorny bush, most likely *Rubus sanguineus* or *Rubus ulmifolius*, both native to the Holy Land and commonly called "holy bramble" or "wild blackberries." These *Rubus* species are evergreens with long, typically intertwining branches armed with sharp, hooked prickles and often growing in dense thickets. They produce a small, edible, black-colored berry.

Christ illustrated the truth that one can discern a person's nature by what that person produces when he explained that one does not gather grapes from a bramble bush (Luke 6:44). New Testament writers used this same Greek word for bramble to refer to the burning bush out of which God spoke to Moses (Mark 12:26; Luke 20:37; Acts 7:30, 35).

Briers: *See* Thistle.

Cinnamon (*kinamōmon*, κινάμωμον, 1x): A spice and perfume made from the inner bark or extracted oil of the Ceylon cinnamon tree, *Cinnamomum zeylanicum*, native to Ceylon and India. The inner bark is stripped from the younger shoots of mature trees and rolled and dried into cylinders, or "quills," for trade. The dried quills can be ground into spice. Cinnamon oil can be extracted from both the bark and the mature fruit of the tree.

In biblical times, cinnamon was a costly and prized import. It was a principal component of the "holy anointing oil" Moses was commanded to make for anointing the tabernacle, its furnishings, and those who ministered therein (Exodus 30:22–33) and was used by the temptress to perfume her bed (Proverbs 7:17; compare Song of Solomon 4:14). John the Revelator foresaw that the merchants of the earth would mourn the fall of worldly Babylon, for it was an important market for their cinnamon (Revelation 18:10–15).

Corn (*sitos*, σῖτος, 1x; *kokkos*, κόκκος, 1x); corn fields (*sporimos*, σπόριμος, 3x); ears of corn (*stachus*, στάχυς, 4x); treading out corn (*aloaō*, ἀλοάω, 2x); grain (*kokkos*, κόκκος, 1x): *Corn* is a generic term used in the KJV for cereal grains such as wheat and barley. Corn in the KJV Bible should not to be confused with New World corn or maize (*Zea mays*).

The Pharisees accused Christ's disciples of breaking the law when on a Sabbath day while passing through fields of "corn" (grain), they plucked "ears of corn" to eat (Matthew 12:1; Mark 2:23; Luke 6:1; compare Mark 4:28). In speaking of his impending death, Christ explained to his disciples that unless a "corn," or kernel of wheat, is placed in the ground and

dies, it cannot bring forth fruit (John 12:24). In reviewing the history of Israel's rejection of God and his covenants, Stephen recounted how Jacob sent their forefathers to Egypt during a famine because he had heard there was "corn" (grain), there (Acts 7:12). As he justified the necessity of receiving material support for their ministry from the people of the church, Paul reminded them that just as the law of Moses prohibited the muzzling of the oxen that "treadeth out the corn," or threshed the grain, so too those in the service of God should not be denied sustenance from those among whom they labored (1 Corinthians 9:9; compare 1 Timothy 5:18).

Cummin (*kuminon*, κύμινον, 1x): *Cuminum cyminium*, a member of the carrot family. Cummin has a long history of cultivation and use in the Near East. Ground seeds from the plant are used as a flavoring for breads, soups, and other dishes, and oil extracted from the seeds can be used in perfumes. It was used medicinally as an antispasmodic and was thought to be good for the eyes.

Cummin was one of the plants tithed under Mosaic law. Christ accused certain scribes and Pharisees of punctiliously paying "tithe of . . . cummin" while neglecting the more important virtues such as justice, mercy, and faith (Matthew 23:23).

Figs (*sukon*, σῦκον, 3x); fig tree (*sukē*, συκῆ, 16x); unripe figs (*olunthos*, ὄλυνθος, 1x): The common fig, *Ficus carica*. Figs have long grown both wild and cultivated in orchards and private residences throughout Bible lands, and they have been an important staple in the Levant from as early as Neolithic times, throughout the biblical era, and into modern times. Fig plants vary in shape from shrubs to trees, depending on growing conditions and varieties. In nature they rely on a symbiotic relationship with a species of wasp for pollination, though varieties exist that require no fertilization to produce fruit. In the Mediterranean climate, figs can yield two crops of fruit each year: winter figs that are ripe by June and summer figs that ripen in August or September. Ripe winter figs may persist on a tree even when summer figs are just beginning to form. Because of their high sugar content, fig fruits can be dried and stored for long periods of time. Anciently, dried fig cakes were regularly prepared to be used between fruitless seasons.

Figs are the first plant mentioned by name in the Bible (Genesis 3:7) and find frequent reference thereafter. They are listed as one of the seven species that characterized the land of Israel (Deuteronomy 8:8). Abigail sent two hundred fig cakes to appease David for her husband's ill-advised arrogance (1 Samuel 25:3–18), and Isaiah prescribed "a lump of figs" to treat King Hezekiah's near-fatal boil (2 Kings 20:7).

Christ used figs to teach his disciples. To illustrate that false prophets cannot bring forth good works, he rhetorically asked if men gather figs (*sukon)* of thistles (Matthew 7:15–20; compare James 3:12). In the Olivet Discourse, he used a parable of a fig tree (*sukē*) to invite his disciples to be observant of the signs of his millennial return, explaining that just as they know summer is imminent when they see a fig tree put forth new branches and leaves, so too they can know his return is at hand when they see the prophecies he had just shared with them fulfilled (Matthew 24:32–33). On one of his final journeys from Bethany to Jerusalem, Christ cursed a barren fig tree, which subsequently withered and died, to provide a manifes-

tation not only of his power but also the power that his disciples could exercise through faith and prayer (Matthew 20:19–22; Mark 11:12–14, 20–24). John used the imagery of unripe figs (*olunthos)* falling from a tree in a strong wind to illustrate how the stars would fall from heaven as part of the natural catastrophes that would accompany the opening of the sixth seal (Revelation 6:13).

Flax (*linon*, λίνον, 1x); linen (*linon*, λίνον, 1x); linen cloth (*sindón*, σινδών, 5x); fine linen (*bussos*, βύσσος, 5x); linen clothes (*othonion*, ὀθόνιον, 5x): The common flax, *Linum usitatissimum.* Flax is perhaps the oldest source of plant textile fibers. Cloth made from flax is best known as linen, a term derived from the Greek *linon*. It is an annual herb that grows up to three feet tall and has long narrow leaves and showy blue flowers. Cultivation of flax for textiles likely originated in the Near East and is thought to have begun as early as the late Neolithic period.

Linen is mentioned throughout the Bible, first appearing as the fine fabric in which Pharaoh dressed Joseph as he appointed him second in command over Egypt (Genesis 41:37–42). Fine linen could be regarded as a sign of wealth and materialism (e.g., Luke 16:19; Revelation 18:12, 16), while pure and white linen clothed angels and saints (e.g., Revelation 15:6; 19:8, 14). In the KJV the Greek *linon* is translated as "flax" only once, when Matthew explains how, when Jesus charged those whom he had healed to not speak of the miracle, he was fulfilling a prophecy of Isaiah, wherein the prophet foretold that the mortal Messiah's passing would be so quiet, gentle, and unnoticed that it would not even "quench" a "smoking flax" (Matthew 12:14–20). In this context the "smoking flax" should be understood as a smoldering linen wick—one that even the smallest stir of wind could extinguish. Linen is likely the fabric that constituted the "swaddling clothes" that warmed and bound up the newborn Christ (Luke 2:7, 12) and certainly the fabric in which he was buried (Matthew 27:59; Mark 15:46; Luke 23:53; 24:12; John 19:40; 20:5–7).

Frankincense (*libanos*, λίβανος, 2x): The aromatic oleo-gum resins extracted from the resin ducts found in the bark of several species of trees in the genus *Boswellia*, including *B. sacra* (found in Arabia and Somalia), *B. papyrifera* (found in Northeast Africa), *B. frereana* (found in Somalia), and *B. serrata* (found in India). Anciently, the precious gum resin produced by these trees was used in a myriad of ways. For example, it was burnt alone or mixed with other materials to make incense for votive and ceremonial purposes; burnt as a fumigant to cleanse and reduce odors; powdered to make fragrant talc and cosmetics; and burnt, chewed, eaten, or powdered to treat a wide variety of maladies such as infertility, bags under the eyes, hemorrhoids, broken bones, and gout. Owing to the remote and very restricted habitat in which the trees grow, the tightly controlled and costly import of the gum resin, and the demand for the product, frankincense was typically a rare and expensive commodity. It often commanded fabulous prices in the markets of the Roman Empire, at times equated with that of gold, and was considered a gift worthy of emperors and kings.

The wise men from the East brought frankincense as a gift for the infant Jesus (Matthew 2:11), not only reflecting the stature and reverence they felt the child deserved, but also significantly enriching the humble peasant family. John the Revelator describes the weeping

and wailing that will arise from merchants that deal with costly commodities such as frankincense when they realize that the sudden fall of worldly and extravagant Babylon deprives them of a market lustful for their precious wares (Revelation 18:10–15).

Gall (*cholé*, χολή, 2x): Likely bitter herbs or some other bitter substance. True gall is actually the bile produced in the bile ducts of animals and is very bitter. Hence, *gall* has become associated with bitterness (e.g., Acts 8:23). Matthew records that Christ was offered "vinegar to drink mingled with gall" (Matthew 27:34), while Mark's parallel account reports he was offered "wine mingled with myrrh" (Mark 15:23), suggesting that the gall Matthew spoke of was actually a bitter herb such as myrrh.

Grain: *See* Corn.

Grapes (*staphulē*, σταφυλή, 3x); vine (*ampelos*, ἄμπελος, 9x); vinegar (*oinos*, οἶνος, 1x; *oxos*, ὄξος, 5x); vineyard (*ampelón*, ἀμπελών, 20x); vineyard, dresser of (*ampelourgos*, ἀμπελουργός, 1x); wine (*oinos*, οἶνος, 30x); wine, given to (*paroinos*, πάροινος, 2x); wine, excess of (*oinophlugia*, οἰνοφλυγία, 1x); wine, new (*gleukos*, γλεῦκος, 1x): The common grape, *Vitis vinefera*. The grape is a shrubby deciduous vine that sends forth from its base many long, sprawling, and climbing branches that can, under ideal circumstances, reach up to thirty feet in length and grow up to twelve feet in a year. The leaves are typically fist-sized and shaped with three to five large, toothed lobes, but size and shape can vary considerably. The bee-pollinated flowers mature into delicious berries that grow in clusters and can vary widely in size, color, texture, and flavor depending on variety and edaphic conditions. Grapes grow marvelously in Bible lands, with reports of plum-sized grapes growing in clusters that average ten to twelve pounds not uncommon. Fresh grapes, raisins, and wine have been primary components of both the sustenance and economy of the people in the Levant since the dawn of history.

Planting a vineyard was one of Noah's earliest acts after leaving the ark (Genesis 9:20), and grapes are listed among the seven species that characterize the bounties of the promised land (Deuteronomy 8:7–8). The annual grape harvest during biblical times was a season of great rejoicing as the fruit was gathered and then eaten fresh, dried into raisins, or, most commonly, processed into wine by treading out the fruit's sweet juice in the winepress or vat. Vocabulary associated with grapes and viticulture abounds in the Bible, such as *vines*, *vineyards*, *wine*, *vinegar*, *winevat*, *winefat*, *winepress*, *vinedressers*, *winebibbers*, and *being drunken with wine.* Flourishing vines were a type for divine favor (e.g., Amos 9:13), and difficulties in viticulture a sign of divine displeasure and punishment (e.g., Isaiah 5:1–6; 16:10).

In the New Testament, John indicates that Christ began the miracles of his ministry with the transforming of water into wine at the wedding in Cana (John 2:1–11). Christ mentioned vines and wine regularly in his teachings. He identified himself as the "true vine" and his disciples as "the branches" that would be pruned (purged) to bring forth more fruit or taken away if unproductive. He promised that those branches that would "abide" in him would be empowered and made fruitful, but they would be cast off and burned if they did not (John 15:1–8). Vineyards provided the setting for several of Christ's parables, including the parable of the laborers hired throughout the day (Matthew 20:1–16), the parable of the two

sons (Matthew 21:28–32), the parable of the wicked husbandmen (Matthew 21:33–41; Mark 12:1–9; Luke 20:9–16), and the parable of the barren fig tree (Luke 6:1–10), in which figs and grapes were cultivated together, a common practice even today. In the parable of the good Samaritan, the rescuer poured a mixture of wine and oil into the victim's wounds to treat them (Luke 10:30–34). In the Sermon on the Mount, Jesus taught that one could identify false prophets by their actions and teachings, or "fruits," explaining that one does not gather "grapes of thorns" (Matthew 7:16; compare Luke 6:44; James 3:12).

In explaining to John the Baptist's disciples why his followers did not observe the fasting practices of the Pharisees, Christ reminded the questioners that one does not put "new wine" into "old bottles" lest the bottles break and the wine be lost (Matthew 9:14–17; Mark 2:18–22; Luke 5:33–39). The wine bottles in this metaphor were made of partially tanned animal skins that, when new, are pliable and elastic but become dry and brittle with age. If one were to put new wine into old bottles, the gas given off as the wine fermented would burst the brittle containers. Accordingly, new wine is stored only in new, supple bottles that can expand as the liquor ferments. The metaphor illustrates that just as the rigid teachings of the Pharisees could not accommodate Christ's gospel, Christ's disciples need not conform to Pharisaical practices.

As Jesus instituted the sacrament at the Last Supper, he used wine ("fruit of the vine") to represent his "blood of the new testament" shed "for the remission of sins" (Matthew 26:27–29; compare Mark 14:23–25; Luke 22:17–18). On the cross, Jesus was offered vinegar after earlier refusing vinegar mixed with gall according to Matthew (Matthew 27:34, 48) and wine mixed with myrrh according to Mark (Mark 15:23, 36; compare Luke 23:36; John 19:29–30). *Vinegar* in these passages refers to sour or acidic wine that was a common drink among the Roman soldiers. Gall is an excretion of the liver and myrrh a bitter-tasting oleo-gum-resin produced by *Commiphora* sp. (see "Myrrh" herein). Some speculate that the "gall" or "myrrh" in these accounts may actually refer to wormwood (see "Wormwood" herein) or some other bitter substance, but whatever constituted the concoction, its purpose seems to have been to dull the senses of the one being crucified, perhaps suggesting why the atoning Christ refused to drink the mixture but partook of the unmixed "vinegar" (actually sour wine).

Those following Nazarite vows, such as John the Baptist, were prohibited from partaking of any product of the vine (Luke 1:15; compare Luke 7:33; Numbers 6:1–3). On the day of Pentecost some thought those speaking in different languages were drunk, being "full of new wine" rather than the gift of tongues (Acts 2:13). Paul counseled the faithful Romans to not drink wine if it would cause others to stumble or be offended (Romans 14:21) and the Ephesians to "be not drunk with wine" (Ephesians 5:18; compare 1 Peter 4:3). He admonished that bishops and deacons should not be given to wine, but that a little wine could be helpful for the stomach and certain infirmities (1 Timothy 3:3, 8; 5:23; Titus 1:7).

In Revelation, an angel warned John that those who "worship the beast" would drink the "wine of the wrath of God," and a subsequent angel likened the wicked to ripened clusters of grapes that would be gathered and trodden in the winepress of the wrath of God when the "Son of man" appeared (Revelation 14:10–20). Ultimately, Babylon would receive the "wine

of the fierceness of [God's] wrath" for imbibing in the wine of her fornication (Revelation 16:19; 17:2; compare Revelation 18:3, 13).

Grass (*chortos*, χόρτος, 10x); hay (*chortos*, χόρτος, 1x): *Grass* is a general term for species of Poaceae, a large and nearly worldwide family of monocot plants. The Greek *chortos* can also refer to hay or herbage in general. With its wide variety of climates and ecosystems, the Holy Land today supports over four hundred species of grass, though some are recent imports to the region. While luxuriant meadows and pastures of grass are rare and typically must be maintained through human cultivation or grow near water sources, hardy wild grasses can be found throughout the land, from the dry deserts of the Negev, through the rolling hills of the Shephelah, in the rugged mountains of the Judean wilderness, among the forests of Bashan, and, most abundantly, in the more fertile and wet northern environs. In the harsher and drier climates, many grass species go through their entire life cycle in a very short period of time, sprouting as precipitation permits, maturing, dropping their seeds, and then disappearing from the landscape in a matter of weeks.

Jesus used the imagery of such transient grass—"which to day is, and to morrow is cast in the oven" but which, like "the lilies of the field," is beautifully clothed by God—to encourage his followers to trust that God will likewise clothe them (Matthew 6:28–31; compare Luke 12:27–28). James similarly likened the fleeting nature of wealth to grass that withers in the sun (James 1:10–11), and so Peter also, quoting imagery from Isaiah, assured that, like grass, the "glory of man" will fade and wither, "but the word of the Lord endureth forever" (1 Peter 1:24–25; compare Isaiah 40:6–8). The five thousand miraculously fed with five loaves and two fishes sat on grass as they received their portion from the disciples (Matthew 14:19–20; John 6:9–12). John the Revelator saw "all green grass" burnt up at the sounding of an angel's trumpet, while the devouring locusts unleashed by another angel's trumpet were commanded to not hurt "the grass of the earth" as they attacked those that did not have "the seal of God in their foreheads" (Revelation 8:1–7; 9:1–4). Paul listed *hay*, perhaps referring to dried grass used to fill chinks in walls, as one of the possible building materials that individuals might use to build upon the foundation of Jesus Christ, warning that whatever they built upon that foundation would eventually be tested by fire to their great loss or reward (1 Corinthians 3:10–15).

Hay: *See* Grass.

Herbs (*lachanon*, λάχανον, 4x; *botané*, βοτάνη, 1x): A general term for herbs, garden plants, or vegetables. Jesus likened the future of the kingdom of heaven to a mustard plant that, though it grows from the "least" or smallest "of all seeds," eventually matures into the "greatest among herbs" (Matthew 13:31–32; compare Mark 4:31–32). Christ chastised the Pharisees for piously paying tithes in herbs while ignoring important virtues such as justice and love (Luke 11:42). Paul admonished the Romans not to dispute with nor despise one who "eateth herbs" (meaning vegetarians), thinking such a diet is required by the law (Romans 14:1–3). To the Hebrews, Paul explained that those who fall away are like poor soil that does not benefit from the rains of heaven and bears only "thorns and briars" that will be burned, while those who stay true to the faith are like good earth that "drinketh in the rain"

and brings forth "herbs" for those who tend it, thus obtaining the blessing of God (Hebrews 6:4–9).

Hyssop (*hussópos*, ὕσσωπος, 2x): Likely *Origanum syriacum*, the Syrian hyssop or marjoram, but the identification is not certain. In some biblical contexts, *hyssop* may refer to other taxon or be a generic term for a group of plants. The Syrian hyssop grows among shrubs, typically in stony ground. Shrubby at the base and more herbaceous at the top, the plant can grow up to three feet tall and has hairy branches and thick, oblong to elliptical, hairy leaves. It is known as *za'atar* among the Arabs and is used in teas and as a spice.

In the Old Testament, hyssop is used in purification rites as a brush for sprinkling water and sacrificial blood (e.g., Exodus 12:22; Leviticus 14:4, 6, 52) and as a purifying agent (e.g., Psalm 51:7; Leviticus 14:52). Paul reminded the Hebrews that the blood Moses sprinkled, using hyssop, over the people, the tabernacle, and the book of the law was a type for the redeeming blood shed by Christ (Hebrews 9:11–20). John records that at one point during the Crucifixion, Christ was offered a vinegar-sopped sponge "upon hyssop" (John 19:29). Matthew and Mark have the sponge being placed on a "reed" (Matthew 27:48; Mark 15:36), which leads some to conclude that the hyssop in John's context may refer to the long stem of a reed grass (see "Reed" herein), such as Sorghum (*Sorghum bicolor*) or Giant Reed (*Arundo donax*).

Lilies (*krinon*, κρίνον, 2x): Likely a general term referring to several species of wildflowers, especially the crown anemone (*Anemone coronaria*). There are two true lilies reported to grow in Bible lands, the Madonna, or white lily (*Lilium candidum*), and the Chalcedonian, or red martagon lily (*Lilium chalcedonicum*). Both, however, are relatively rare and restricted to mountainous regions and thus not likely candidates for the "lilies of the field" that Jesus used to illustrate the effortless beauty of God's creation and the care he gives it (Matthew 6:28–30; see Luke 12:27–28). In contrast, the crown anemone is a common and beautiful wildflower that produces brilliant scarlet flowers that, along with other showy native flowers, fill the fields of the Holy Land with an explosion of color in early spring and then fade as summer heat desiccates the land. Jesus encouraged his disciples to trust in God's care by reasoning with them that if God would clothe the transitory grass and lilies of the field in such splendor, "how much more will he clothe you . . . ?" (Luke 12:27–28; see Matthew 6:28–30).

Linen: *See* Flax.

Mint (*héduosmon*, ἡδύοσμον, 2x): Likely horse mint (*Mentha longifolia*). Several mint species are native to Bible lands, with horse mint being the most common. It is a large species of mint that can grow up to three feet tall; produces relatively small, toothed, lanceolate to oblong leaves on stems covered with tiny hairs; and has small lilac-colored flowers clustered in terminal spikes. Mints are typically found growing along watercourses, swamps, and ditches. The delightful aroma and flavor of mints that derive from their essential oils have made them a popular condiment and flavoring for meats, soups, salads, and teas. Horse mint was also prized for its medicinal properties used in infusions as a carminative, stimulant, and mild analgesic. Along with anise and cummin, mint was one of the plants tithed under Mosaic law. Christ chastised certain scribes and Pharisees for dutifully paying tithes on these

commodities but ignoring the more important virtues of justice, mercy, and faith (Matthew 23:23; compare Luke 11:42).

Mustard (*sinapi*, σίναπι, 5x): Likely black mustard (*Brassica nigra*). Historically, the taxonomic identity of the New Testament "mustard" has been an issue of considerable debate. The white mustard (*Sinapis alba*), the charlock mustard (*Sinapis arvensis*), and even non-mustards such as the toothbrush tree (*Salvadora persica*) and the pokeberry (*Phytolacca decandra*) have all been proposed as possible identities for the plant. Today, however, most conclude that black mustard is the likely taxon of Jesus's mustard parables, for it is a common and conspicuous herb that grows abundantly in the wild and was cultivated in the Galilee during New Testament times. Black mustard has been reported to grow up to ten feet and typically reaches three to six feet in height. It produces large leaves, mostly at the base, and, at the ends of its many branches, a plethora of small, brilliant yellow flowers that mature into many-seeded elongated siliques. The tiny seeds are ground to produce the mustard powder and oil used since biblical times as a flavoring, condiment, and medicament.

Jesus likened the future growth of "the kingdom of Heaven" to a mustard grain or seed that, though small at first, even "the least of all seeds," matures to be "the greatest among herbs," even becoming a "tree" in which birds can "lodge" (Matthew 13:31–32; compare Mark 4:31–32; Luke 13:19). Hyperbole is perhaps involved in this parable, for though the seeds are small, they are not the smallest or "least" among seeds. Moreover, being an annual herb, black mustard is not a true tree. Still, the mature plants can be large and sturdy enough to support the small birds that forage on the seeds. Using a mustard seed as a proverbial type for the incredibly small, Jesus promised his disciples that even if they could have only as much "faith as a grain of mustard," they would still have the power to "remove" a "mountain," a proverbial type for the incredibly large (Matthew 17:20; compare Luke 17:6).

Myrrh (*smurna*, σμύρνα, 2x); myrrh, mingled with (*smurnizó*, σμυρνίζω, 1x): The aromatic oil/gum resin extracted from various species of *Commiphora* such as the African myrrh (*C. myrrha*), the Abyssinian myrrh (*C. abyssinica*), or the Indian myrrh (*C. kataf*). *Commiphora* are native to Arabia, Somalia, and Ethiopia. They are typically thick-branched shrubs or small trees that thrive in rocky and relatively arid soil. Along their robust branches, small leaves, divided into three tiny egg-shaped leaflets, nestle among stout thorns. Like other members of the Burseraceae family, such as frankincense, *Commiphora* species produce an oily gum resin that, though bitter to the taste, is highly priced for its aromatic, cosmetic, and medicinal properties. Ancient Egyptians burned myrrh resin in their temples, used it to make perfumes, and embalmed their dead with it.

In biblical times, myrrh was a precious trade commodity (e.g., Genesis 37:25; 43:11), a component of the "holy anointing oil" (Exodus 30:23–25), and an enticing perfume (e.g., Proverbs 7:17; Psalm 45:8; Song of Solomon 1:13). Myrrh appears at both the birth and death of Jesus. It was among the costly gifts brought by the wise men to honor and enrich the Christ child and his family (Matthew 2:11). Three decades later, while suffering upon the cross, Christ refused to drink the analgesic "wine mingled with myrrh" offered by his

tormentors (Mark 15:23). The grieving Joseph and Nicodemus layered costly myrrh and aloes within the linen wrappings used to bind the Savior's body for the tomb (John 19:39).

Oil: *See* Olive tree(s).

Ointment: *See* Olive tree(s).

Olive tree(s) (*elaia*, ἐλαία, 3x); olive berries (*elaia*, ἐλαία, 1x); olives, Mount of (*oros tōn Elaiōn*, ὄρος τῶνἘλαιῶν, 7x; *orous tōn Elaiōn*,Ὄρους τῶνἘλαιῶν, 2x); Olivet (*Elaiōn,* Ἐλαιῶν, 1x); oil (*elaion*, ἔλαιον, 11x); ointment (*muron*, μύρον, 13x): The common olive, *Olea europea.* The olive is a magnificent tree that thrives even in the rocky and poorer soils of the Bible lands. It typically grows fifteen to twenty-five feet high, and the gnarled trunks of the oldest trees can exceed three feet in diameter. Gray to blue-green, oblong to elliptical leaves cover its many branches, and its small white flowers mature into one-seeded drupes, typically about one inch in length. The slow-growing trees can live for centuries, producing fruit even when the trunks are hollow and the larger branches ancient. The tenacious and tortured appearance of the oldest olive trees seems to characterize the Holy Land's people, culture, history, geography, and ecology.

Cultivated olives, those producing the best fruit, are propagated by grafting and from biblical times until today are found throughout the country in large commercial olive-yards, small village orchards, and private home gardens. The earliest archaeological evidence of olive use currently dates to the fourth millennium BC. Anciently the olive harvest was an important family and community activity. Ripe fruit was gathered in the autumn by beating on the limbs of the trees with sticks and placing the fallen fruit into baskets. Then various kinds of heavy, cleverly engineered stone and wooden implements were used to crush the drupes and press and separate the precious oil from the mash.

Arguably, no other plant has played a greater role in the sustenance, economy, and daily life of biblical people. Its fruit was eaten from ripe and cured to green and pickled. Its wood was prized by craftsmen for its hardness, beauty, and polished luster. Most importantly, its versatile oil permeated the daily life of every individual. It was used to make holy ointments to anoint kings and priests; burned in lamps to provide light for households, businesses, and the temple; poured on the sick for anointing; used as a base and solvent for perfumes, spices, cosmetics, medicines, incenses, and aromatics; applied as a dressing for skin and hair; and copiously consumed when used in food preparation, flavoring, and cooking.

Thus, as one might expect, olives and olive products are mentioned throughout the Bible. For example, in the Old Testament a dove brought an olive leaf to Noah to inform him that the waters of the deluge had abated (Genesis 8:11), and the olive was one of the seven species that characterized the promised land (Deuteronomy 8:8). Most, if not all, biblical references to oil, ointment, or anointing indicate the use of olive oil. Thus, Jacob poured olive oil over the memorial pillar he constructed at Bethel (Genesis 28:18). Likewise, the tabernacle and later the temple were continuously illuminated by the burning of pure olive oil (Exodus 27:20), and olive oil even constituted an essential part of many kinds of offerings (e.g., Leviticus 2:1–7, 15; 6:21).

Similarly, in the New Testament olives and olive products are regularly mentioned. For example, oil was used to anoint the sick (Mark 6:13; James 5:14), and Paul taught that God anointed the Son "with the oil of gladness" (Hebrews 1:8–9). It likely was an olive oil–based ointment that at least one or perhaps two devout women used to anoint Jesus as they reverenced and worshipped him in preparation for his "burial" (Matthew 26:6–13; Mark 14:3–9; Luke 7:36–50; John 12:1–9),[5] and the good Samaritan used oil medicinally as he poured it into the wounds of the newfound neighbor he rescued on the road to Jericho (Luke 10:29–37). Oil is also mentioned as a trade good in parables and visions (e.g., Luke 16:6; Revelation 6:6; 18:13) and was the critical commodity in Christ's parable of the ten virgins who were awaiting the arrival of the tarrying bridegroom. The five foolish virgins who failed to bring extra olive oil appear to represent those of the faithful who wish to rejoice with the Messiah when he returns but fail to be adequately vigilant and prepared for his delayed coming. The olive oil itself perhaps symbolizes the obedience, service, study, and devotion requisite to knowing and being known by the Lord. Such oil cannot be borrowed from another or acquired at a moment's notice, but rather must be obtained before his coming through individual effort (Matthew 25:1–13).

Olive trees are also used metaphorically in the New Testament. Paul likened Israel to an olive tree and the gentile converts to wild branches grafted into its roots (Romans 11:17–24). Similarly, the two prophets who minister shortly before the appearance of the Messiah are identified as the "two olive trees" of Zechariah's vision (Revelation 11:3–4; compare Zechariah 4:11–14). Interestingly, James uses the absurdity of expecting a fig tree to produce olives to the foolishness of the faithful not controlling their tongues (James 3:2–18).

Considering the import of olives and olive products in the lives of biblical peoples, it seems appropriate that the Mount of Olives, so named for the olive orchards on its slopes, was the location for the beginning of Christ's triumphal entry (Matthew 21:1–16; Mark 11:1–14; Luke 19:29–40), the site where he taught his disciples of the future trials and triumphs of his kingdom (Matthew 24:3–51; Mark 13:3–37; compare Luke 21:37), the background for his atoning suffering, and the location of his ascension (Matthew 26:30–46; Mark 14:26–42; Luke 22:39–46; Acts 1:9–12).

Olivet: *See* Olive tree(s).

Palm (*phoinix*, φοῖνιξ, 2x): The date palm, *Phoenix dactylifera*. The date palm is one of the most ancient and characteristic of all fruit trees in the Holy Land. Typically growing thirty to sixty feet tall, its unbranched trunk terminates in an explosion of fibrous pinnate fronds six to nine feet long. Female trees produce huge clusters, often weighing thirty to fifty pounds, of single-seeded fruits that are prized for their sweet, fleshy pulp. The archaeological evidence for date cultivation dates back to about 4000 BC in the Levant. Historically, every part of the date tree was used. Date fronds were used for thatching and fence building. The fibrous leaves were formed into household utensils, and also used for weaving mats and baskets. The massive trunks provided timber for fences and rafters. Rope was made from date tree fibers. Most importantly, the fruit and honey derived from it were important parts of the biblical diet.

Moses identified dates, referring to their "honey," as one of the seven species that were indicative of the bounty of the promised land (Deuteronomy 8:8). Carvings of date leaves and trunks were used as architectural embellishment on Solomon's temple (1 Kings 6:29, 32; compare Ezekiel 40:31). Jericho is called the "city of palm trees" (Deuteronomy 34:3), and the Hebrew word for dates, *Tamar,* was a common name for biblical places and persons (e.g., Genesis 14:7; 38:6; 2 Samuel 13:1; 2 Chronicles 8:4). "Bethany," the home of Martha, Mary, and Lazarus and site of some of the Savior's most moving experiences (e.g., John 11–12), means "the house of dates." During the Feast of Tabernacles, the covenant people were instructed to take "boughs of goodly trees," including "branches of palm trees, . . . [and] rejoice before the Lord your God seven days" (Leviticus 23:40). Thus, the waving of palm fronds became a practice of rejoicing and praise. Today Christians celebrate "Palm Sunday," commemorating Christ's triumphal entry into Jerusalem, wherein those praising him "took branches of palm trees, and went forth to him" crying "Hosanna: Blessed is the King of Israel" (John 12:13). John saw in vision great multitudes from every nation, kindred, people, and tongue likewise holding "palms in their hands" as they worshipped God and the "Lamb" (Revelation 7:9).

Reed (*kalamos*, κάλαμος, 11x): A generic term for exceptionally tall, slender grass species that generally grow in water or marshy ground. They typically have robust stems that are often hollow or segmented. Depending on context, the Greek root *kalamos,* translated as "reed" in the KJV, can refer to an actual reed plant, a reed pen, a reed staff, or a reed measuring rod. Several species of grasses native to Bible lands fit the description of reeds. Four species of the common reed, *Phragmites* sp., grow in the Levant, with *Phragmites australis* being the most abundant. They are common in swamps and marshy areas where they range from three to fifteen feet in height. The hollow and jointed canes produced by these reeds were used for mats, pens, walking sticks, hedges, and even home construction. The giant reed grass, *Arundo donax,* is an especially large reed that can grow up to twenty feet tall and has stems as thick as three inches in diameter. Along the Jordan River and some coastal regions of the Dead Sea, it can grow in nearly impenetrable thickets. Its canes have historically been used for such items as measuring rods, walking sticks, fishing rods, and musical pipes. Durrah or Indian millet, *Sorghum bicolor,* is another reedlike grass that typically grows up to six feet tall in the Holy Land. The stems have a thick pith, like sugarcane, but it is not sweet. It is cultivated both in the lowlands and mountains as a summer crop that does not need irrigation. Its globular seeds, also known as Jerusalem corn, have historically been used for animal feed and to make a coarse bread and meal. Cattails (*Typha* sp.), though not grasses, are another genus of reedlike plants native to the Holy Land. These aquatic or semiaquatic species can grow nine to twelve feet tall and have long sticklike fruiting stems. Their leaves are used in basketwork and mat making.

Jesus implied that John the Baptist was not a "reed shaken with the wind," perhaps indicating that he was not one moved to-and-fro by every gust of adversity or popular culture—he was not a waverer (Matthew 11:7; Luke 7:24). Matthew saw in Jesus's charge to those he healed to "not make him known" a fulfillment of Isaiah's messianic servant prophecy

wherein the prophet described the ministry of the servant as being so nurturing, compassionate, and quiet in passing that it would not break a "bruised" or fragile reed (Matthew 12:15–20; compare Isaiah 42:1–3). When the thin siliceous walls of reeds are bruised, even the smallest gust of wind can topple them over. In mocking the kingship of Jesus, the Roman soldiers, in Matthew's record, put "a reed in his right hand" to imitate a king's scepter (Matthew 27:29–30), while Mark indicates they smote him upon the head with it (Mark 15:19). Later, a reed was used to hoist a sponge soaked in vinegar (sour wine) to the lips of the suffering Savior on the cross (Matthew 27:48; Mark 15:36). In his apocalyptic vision, John was given a reed measuring rod to measure the temple and its altar and worshippers, with the measuring seeming to be an assurance of protection in the face of impending danger (Revelation 11:1). Later in the revelation, he talked with an angel holding a golden reed, which the angel used to measure the city, gates, and walls of the New Jerusalem (21:15–16). In this case, the measuring appears to illustrate the beauty and proportions of the glorious city.

Spices (*aroma*, ἄρωμα, 4x; *amomon*, ἄμωμον, 1x): A generic term for aromatic or sweet herbs. Nicodemus and Joseph of Arimathea layered spices, including aloes and myrrh, in the linen wrapped around the body of Christ to prepare him for burial (John 19:38–40). After the Sabbath, Mary Magdalene, Salome, and Mary the mother of James brought more spices intending to further "anoint him" (Mark 16:1; compare Luke 23:56; 24:1). Considering that Nicodemus and Joseph of Arimathea had already prepared Jesus's body with "an hundred pound weight," approximately 75 US pounds, of spices, the mourning women seemed to want to add their spices, not out of necessity but rather out of love and adoration. The use of such extravagant amounts of spices in royal burials is attested by Josephus (*Antiquities* 17.199; compare 2 Chronicles 16:14) and perhaps indicates that the faithful individuals preparing Jesus for burial recognized his royal station.

Spikenard (*nardos*, νάρδος, 2x): Likely the nard plant *Nardostachys jatamansi* and the oil derived from it. A native of Nepal and other parts of the Himalayas, spikenard is a short, hairy, perennial herb that produces small clusters of white to pink blossoms. An aromatic oil is produced throughout the plant and is especially abundant and fragrant in its roots. The oil was used anciently in perfumery and incense making, though modern tastes typically find its aroma unappealing. Mixed with other oils, a spikenard ointment was used to treat nervous disorders. Because of its distant origin, it was a costly commodity in the New Testament lands, typically imported in sealed alabaster containers that were broken open only for special occasions. Mary's anointing of Jesus's feet with the precious ointment, followed by the wiping of them with her hair, is one of the most intimate and tender expressions of love and devotion in all scripture (John 12:1–6; compare Mark 14:3–7; Matthew 26:6–13).

Sycamine (*sukaminos*, συκάμινος, 1x): Though its name is similar in sound in both Greek and English renditions, the biblical "sycamine" or mulberry tree (*Morus* sp.) should not be confused with the "sycomore" or sycamore fig tree (*Ficus sycomorus*) discussed below. While many species of mulberry exist throughout the world, historically two have been cultivated in Mediterranean countries: the white mulberry (*Morus alba*), originating in China and grown for its leaves that feed silkworms, and the black mulberry (*Morus nigra*),

originating in Persia and cultivated for its berrylike fruit that has a sweet and sour flavor. Whereas the white mulberry is a more recent introduction into Bible lands, it is thought that the "sycamine" that Christ taught could be "plucked up" and "planted in the sea" if one had sufficient faith (Luke 17:6) was the black mulberry. Because it grows upward of thirty feet tall, with a thick crown and rigid branches, the moving of a black mulberry tree by any means would be a formidable task.

Sycomore (*sukomōrea*, συκομωραία, 1x); The sycamore fig, *Ficus sycomorus*, not to be confused with the common sycamore (*Platanus occidentalis*), the English sycamore (*Acer pseudoplatanus*), or the biblical sycamine (*Morus nigra*). In the same genus as the common fig, this robust evergreen tree produces copious quantities of figs in clusters along all of its parts, including both old and new branches and even on its trunk. Though the fruit is inferior in quality and flavor to the common fig, it is still sweet and so prodigiously produced that it was widely consumed anciently, especially among the poor. In order for the tree to produce ripe, edible figs, each wasp-fertilized fruit must be individually pierced or incised by hand at just the right stage of development, a task accomplished by sycamore tenders such as the prophet Amos (Amos 7:14). The trees can be massive, upward of forty feet tall, with trunk circumference reaching twenty feet and crowning canopies 120 feet in diameter, thus providing a perfect perch from which short spectators such as Zacchaeus could rise above the crowds to observe the passing of Jesus (Luke 19:1–6).

Tares (*zizanion*, ζιζάνιον, 8x): The bearded darnel, *Lolium temulentum*. This noxious weed grass grows exclusively in grainfields and is propagated annually by being harvested with the grain and resown with the next planting of the contaminated seed. A poisonous fungus can infect the seeds of darnel, rendering flour made from darnel-contaminated grain toxic. Consuming the contaminated flour reportedly can cause a state of drunkenness, blindness, or even death. Once mature plants produce seed heads, darnel and wheat can be easily distinguished from each other, but before going to seed, they are very similar in appearance. Moreover, the actual grains produced in the seed heads of wheat and darnel are very similar and difficult to separate after threshing. Thus, in the parable of the wheat and the tares (see Matthew 13:24–30), the fact that an enemy had sown tares in the field was not recognized until the blades had "brought forth fruit" (Matthew 13:26). While the unripe tares could have been uprooted immediately upon discovery, the wise householder feared doing so would uproot the unripe wheat as well. To avoid damaging the wheat, he instructed his servants to wait until the time of the harvest, when both the tares and wheat would be fully ripe, and only then to gather out and burn the tares first before bringing the wheat to the barn. This was certainly a labor-intensive strategy, but the only safe means whereby the wheat could be protected and cleansed of the contaminants. The parable warns that the "kingdom of heaven," which in this context appears to refer to the church, may include "tares" who are emissaries of the adversary placed to masquerade as devout members but who in truth harm the whole. The parable assures that the adversary's efforts to pollute the kingdom will come to naught when they are exposed by their ripened "fruits" and gathered for destruction while the good grain is gathered for preservation.

Thistle (*tribolos*, τρίβολος, 1x); briers (*tribolos*, τρίβολος, 1x): Thistle is a generic term for herbaceous plants from the Composite family that are armed with sharp prickles and spines. Many species of thistle grow in Bible lands, including globe thistle (*Echinops viscocus*), golden thistle (*Scolymus maculatus* and *Scolymus hispanicus*), holy thistle (*Silybum marianum*), Spanish thistle (*Centaurea iberica*), and Syrian thistle (*Notobasis syriaca*). Thistles are typically considered noxious weeds and a manifestation of the curse that came upon the ground because of the fall from Eden (Genesis 3:17–18). Christ taught that one can identify false prophets by their "fruits," meaning the results of what they say and do, illustrating the point with the observation that one does not gather figs from thistles (Matthew 7:16; compare Luke 6:44). The Epistle to the Hebrews warns that if those "once enlightened" with the "heavenly gift" fall away, it is "impossible" to "renew them again" through repentance, for in their apostasy they "crucify to themselves the Son of God afresh, and put him to open shame," just as earth or soil that has been blessed with the gift of rain from heaven but still brings forth "briers" rather than good herbs is cursed and will ultimately be burned (Hebrews 6:4–8).

Thorn(s) (*akantha*, ἄκανθα, 14x; *skolops*, σκόλοψ, 1x); thorns, of (*akanthinos*, ἀκάνθινος, 2x): A generic term for a stiff, sharp-pointed straight or curved process projecting from the stems, branches, or other parts of a plant. Zohary notes that more than seventy species of plants that produce thorns or spines grow in Bible lands and that the combined twenty Old and New Testament terms for thorns, thistles, nettles, briers, brambles, burrs, cockles, and so forth are often misidentified or arbitrarily translated in the Bible. To avoid incorrect identification, he recommends translating all such terms simply as "thorns" or "thistles" collectively.[6] Thorn-bearing species in the Levant include the evergreen Christ thorn tree (*Ziziphus spina-christi*). It can grow up to thirty feet tall and produces two short but sharp thorns, one straight the other curved, at the base of each leaf. The Christ thorn is so named for its popularity as the source for the "crown of thorns" placed by the soldiers on the Savior's head as they mocked his kingship (Matthew 27:27–31; Mark 15:17; John 19:2–3, 5), but the thorns produced by both it and its close relative, the shrubby lotus thorn (*Ziziphus lotus*), are hardly formidable. Likewise, the thorns produced by another shrubby plant that is also commonly called Christ thorn, *Paliurus spina-christi*, though sharp, are comparatively short and less than impressive. Moreover, though the flexible vines of the shrub can be readily woven into a wreath, the plant is not common around Jerusalem. A more likely candidate from which the crown of thorns would have been made is the heavily armed shrub thorny burnet (*Sacropoterium spinosum*), which is common around Jerusalem and has long been used as a protective hedge in the region. The thorns on thorny burnet are robust, long, and dense, formed as branchlets that dry and harden after flowering. Other common thorn-bearing species include herbs and shrubs such as bramble (*Rubus sanguineus*), gray nightshade (*Solanum incanum*), spiny zilla (*Zilla spinosa*), gundelia (*Gundelia tournefortii*), Syrian acanthus (*Acanthus syriacus*), buckthorn (*Rhamnus palaestina*), and boxthorn (*Lycium europaeum*), as well as trees such as pomegranate (*Punica granatum*) and acaia species (*Acacia nilotica, A. seyal, A. tortilis*).

Generally, in the New Testament thorns are used to illustrate the negative. In teaching that men should be judged by their fruits, meaning their words and works, Christ rhetorically asked, "Do men gather grapes of thorns . . . ?" (Matthew 7:16; see Luke 6:44). In the parable of the sower and the soils, he likened thorns to the "care of this world" and the "deceitfulness of riches" that can "choke" the faith and productivity out of those who "heareth the word" (Matthew 13:3–9, 18–23; see Mark 4:3–20; Luke 8:5–15). Paul lamented, but came to appreciate, what he learned from an unidentified "infirmity" that he called a "thorn in the flesh, the messenger of Satan" that buffeted and humbled him (2 Corinthians 12:7–9). To the Hebrews, he explained that heavenly watered soil that yet produces thorns is to be rejected, cursed, and burned just as are those who apostatize after having tasted the "heavenly gift" (Hebrews 6:4–8).

Vine: *See* Grapes.

Vinegar: *See* Grapes.

Vineyard: *See* Grapes.

Wheat (*sitos*, σῖτος, 12x): Wheat (*Triticum* sp.) was and is today the most important cereal crop cultivated in Bible lands. It truly is the staff of life in the Levant and the first of the seven species Moses listed to illustrate the bounties of the promised land (Deuteronomy 8:8). Wheat was first domesticated in the ancient Near East during Neolithic times and has been cultivated ever since. Though wheat taxonomy and history are topics of considerable debate and confusion among scholars, it appears that the winter wheats durum (*Triticum durum*) and emmer (*Triticum dicoccum*) were the most important species utilized during New Testament times. Both were dry farmed (grown without irrigation); sown at the beginning of the winter rains in September and October; and harvested, threshed, and winnowed during early summer, typically in late June or July. Other wheats that are or have been cultivated in the region include einkorn (*Triticum monococcum*) and bread wheat (*Triticum aestivum*). The native wild emmer (*Triticum dicoccoides*) may have also been utilized during early biblical times, though its easily shattered and hulled seeds would have been difficult to process. The Greek term *sitos* is a generic term for any kind of cereal grain but typically is understood to refer to wheat. In the KJV it is translated as "wheat" in every instance (e.g., Acts 27:38; Revelation 6:6; 18:13) except once where it is rendered "corn" (Acts 7:12).

In New Testament times, harvesting wheat required several labor-intensive processes. First the dry, ripe wheat stalks were cut close to the ground and tied into sheaves. The sheaves were then laid flat on a threshing floor, an area of hard-beaten and compacted earth or bare rock, and then ground and pulverized, typically by pulling a threshing sledge or driving a heavy cart over them (see Isaiah 28:26–28). The threshing would knock the seeds from the seed heads and grind all the rest of the plant material into chaff. Then on a windy day the mixture of chaff and grain would be thrown into the air using a winnowing fork, causing the lighter chaff to blow away and the clean, heavier seeds to fall back to the floor. An alternative to waiting for a windy day for winnowing was to aggressively wave a winnowing fan over the mixture of threshed seeds and chaff on the threshing floor. The wind created by the fan would blow away the lighter chaff, leaving the heavier purged or clean seeds in place to be

gathered and stored for use. After winnowing, the useless but highly combustible chaff was disposed of in fires that were extraordinarily intense and sometimes explosive. John the Baptist used winnowing imagery as he described the Messiah as one "mightier" than he, "whose fan is in his hand, and he will thoroughly purge his floor, and gather his wheat" while the chaff would be burned with unquenchable fire (Matthew 3:11–12; Luke 3:17). Christ likewise referred to the rigors of harvesting, threshing, and winnowing wheat to warn Peter of Satan's desire to "sift" him as wheat (Luke 22:31). He also used wheat imagery in some parables. In the parable of the wheat and the tares, the householder's enemy sowed tares in the wheat field in an effort to pollute and spoil the crop, just as the adversary places or entices some members of the Church to do it harm (see Matthew 13:24–30; see also "Tares" herein). In the parable of the unjust steward, the deceitful man attempted to endear himself to one of his master's debtors by fraudulently allowing the debtor to write off 80 percent of his debt of wheat, apparently hoping the debtor would return the favor in some way when the steward's master fired him for his wasteful practices (Luke 16:1–12). Christ attempted to help Philip and Andrew understand the blessings that would result from his impending death, as well as the necessity of it, by explaining, "Except a corn of wheat fall into the ground and die, it abideth alone: but if it die, it bringeth forth much fruit" (John 12:24). The imagery likely made sense to the two disciples when they came to understand that Christ's death and resurrection brought forth the resurrection of all humankind (1 Corinthians 15:20–23, 35–38).

Wine: *See* Grapes.

Wormwood (*apsinthos*, ἄψινθος, 1x): A generic name for a group of aromatic, often woody species of *Artemisia* closely related to sagebrush. White wormwood (*Artemisia herba-alba*) is the common wormwood of the Holy Land. It is a dwarf, heavily branched shrub that has small, hairy, dissected leaves in the rainy season and scale-like leaves in the summer. The plant has a bitter taste and has been used medicinally as an antiseptic and antispasmodic. A bitter tea made from wormwood was used to treat intestinal worms, hence its common name. At the sounding of the third angel's trumpet during the seventh seal, John the Revelator saw a star "called Wormwood" that fell upon the waters of the earth, causing a third part of them to become "wormwood" and "bitter" (Revelation 8:11; compare Jeremiah 23:15; Amos 5:7), apparently representing the bitter troubles, calamites, and disasters that will unfold in that apocalyptic era.

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Further Reading

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Notes

1. Michael Zohary, *Plants of the Bible* (Cambridge: Cambridge University Press, 1982), 13–14.
2. The terms or names for each entry below are listed in alphabetical order and are drawn solely from the King James Version of the Bible. The parenthetical information following each entry term presents first a transliteration of the Greek root from which the term was translated, followed by the root as it is written in Greek, and then a count of how many times the root is translated with the entry term in the KJV. For example, under the first entry, "Aloes," the parenthetical information "*aloe*, ἀλόη, 1x" indicates that "aloes" in the KJV is translated from a form of the Greek root *aloe*, written ἀλόη in Greek, and translated one time as "aloes" in the KJV.
3. Botanical information found under each entry was gathered from the following volumes: Anthony G. Miller and Miranda Morris, *Plants of Dhofar, The Southern Region of Oman: Traditional, Economic and Medicinal Uses* (Diwan of the Royal Court, Sultanate of Oman: The Office of the Adviser for Conservation of the Environment, 1988); Harold N. Moldenke and Alma L. Moldenke, *Plants of the Bible* (Waltham, MA: Chronica Botanica, 1952); Paul T. Nicholson and Ian Shaw, *Ancient Egyptian Materials and Technology* (Cambridge: Cambridge University Press, 2000); Allan A. Swenson, *Plants of the Bible and How to Grow Them* (New York: Carol, 1994); Winifred Walker, *All the Plants of the Bible (*New York: Harper and Brothers, 1957); Michael Zohary and Naomi Feinbrun-Dothan, *Flora Palestina*, parts 1–4, 2nd ed. rev. (Jerusalem: Israel Academy of Sciences and Humanities, 2015); and Michael Zohary, *Plants of the Bible* (Cambridge: Cambridge University Press, 1982), 13–14.
4. Jacob Neusner, ed., *The Talmud of the Land of Israel*, vol. 7: *Maaserot*, trans. Martin S. Jaffee (Chicago: The University of Chicago Press, 1987), 190–91.
5. All of the Gospels record the anointing of Jesus with costly ointment by a woman while he was at a house. The details among the accounts vary concerning who anointed him, what part of his body was anointed, when he was anointed, and what was said at the time, which has led some to conclude that Jesus was anointed on two different occasions, once by a woman known to be a sinner and later by Mary the sister of Lazarus and Martha. Others hold that the anointing was a single event that the Gospel authors simply recall differently.
6. Zohary, *Plants of the Bible*, 153.