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# **ARBORIST REPORT**

Preliminary Report Prior to Development Details

#### Assignment

Per the request of Ali Negus of Altus Equity Group, LP; Ken Menzer of **ABACUS** was hired to make an arborist report as required by the City of Citrus Heights for a lot split on this parcel of land, APN 245-0180-021 (Sacramento County), Citrus Heights, CA.

#### On-site observations & Summary

Ken was on-site October 7& 14th, 2013 to tag the trees, do the field identification, measurements, to assess the current condition of the protected trees, what could be done to improve the quality (and reduce the hazard potential of the trees), plus to assign an overall rating for each tagged tree. I personally did all the measuring, tagging, field notes, and rating.

I checked, identified, and measured all of the trees on site I found 25 trees: 14 trees were not protected (per City of Citrus Heights Municipal Code Chapter 106.39-Tree Preservation and Protection), due to their small size and species, 4 trees were rated as too poor of condition (Health + Structure = Condition); 1 tree is dead & cut down, and 8 trees are protected as native oaks 6" in diameter or greater (measured at 54" above grade) DBH, a multi-trunked [native] oak having an aggregate diameter of 10" also at the DBH point. 1 tree is "other protected trees" are all other trees 19" DBH or greater, with the exception of: Willows (Salix spp.), fruit trees, eucalyptus (Eucalyptus spp.), alder (Alder spp.), cottonwood (Populus spp.), pine (Pinus spp.), catalpa (Catalpa spp.), fruitless mulberry (Morus spp.), or palm (Acoelorrphe spp. [Washingtonia, Phoenix, Syagrus, or Trachycarpus]).

Data gathered (see Chart B on pages 4 & 5, plus "Tree Site Map" on page 8)

# **Tagging (Tree Number):**

The trees, for purpose of discussion with this report, have been identified by number on the trees, on the tree plan, and also in this report. Each of the trees were tagged at  $\sim$ 6' above grade, on the south side of the tree with a green "acorn-shaped" (1-1/8" x 1-3/8") anodized aluminum tag with pre-stamped (1/8") numbers from #418 to #442, nailed to allow the tree to grow without the normal growth pushing off or engulfing the tag for 5-10 years. The tree location map by tag/tree number is at the end of this report . All native oaks 6" DBH and greater or 10" aggregate multi-trunked oaks, plus other protected trees 19" DBH and greater were tagged and are included within this arborist report. The tags were installed to the tree with nails 2.5" long and being green in color, there will be less potential for tag theft or vandalism during the development period.

## Tree Name (Botanical & Common):

Trees frequently cross pollinate and hybridize with other trees generally of the same Genus. The parent trees may not be of a pure strain of that species, so the off-spring "seedling" may very well be quite complex, but the name of the tree that is used is the botanical and common name of the species closest to that (maybe slight) variation of the pure strain (if that can ever exist). When a 'cultivar' name is applied by the arborist, it is carefully done to be as correct as possible, but seedling possibilities and cultivar possibilities can be quite subtle and may not be 100% accurate on existing trees found in-the-field.

# DBH<sup>1</sup> (in diameter inches):

This is normally measured at 4'-6" (above the average ground height), but if that varies then the location where it is measured is noted here. A steel diameter tape<sup>2</sup> was utilized for all the trees' DBH measurements. The measurement locations possibilities are all shown in diagram form for most variations from the norm in "Tree SIZE Expressed in Trunk Diameter" on page 12 of this report.

## Stems:

This refers to the quantity of trunks or stems (also see "Tree Size Expressed by Trunk Diameter" at the end of this report) that are connected enough and are of the same species, that if one stem or trunk were to be removed, it would cause decay to harm an adjoining stem... making it one tree.

## Canopy Radius (in feet):

There is a conflict with measurement terms in the City of Citrus Heights Code §106.39.030 (A) (2, b., 2, a) which says "The radius of the protected zone is a circle equal to the trunk diameter in inches converted to feet. (For example, the radius of a tree with a trunk of six inches is six feet.) Trunk diameter is measured at 54 inches above the ground." ... whereas... in §106.39.040 (A) (6.) "Protected zone radius by tree number (measure longest radius)".

This is the radius measurement from the center point of the trunk to the horizontal farthest dripline of the canopy of leaves and twigs and then becoming a circle that minimally needs to be protected as the <u>Critical Root Zone</u> (CRZ) or Tree Protection Zone (TPZ). This is also how a tree is drawn manually or via programs like AutoCAD, starting at a center point of the tree, to the outer radius (<u>not</u> measuring from the surface of the tree to the farthest edge of the canopy). It is almost impossible to measure the irregular dripline area, so this is a practical method to show an approximation of the furthest and longest dripline as a circular area to be protected around the trunk, as roots tend to go equally in all directions from the trunk and do not follow under the branches above ground. If the branches are cut back (the dripline reduced in size) the roots do not retreat and the CRZ or TPZ stays the same size. I have elected to use the Longest Dripline Radius in this report.

Observations (Field Notes): These are what I saw from viewing the tree from the ground. It does not include climbing, aerial inspections, core & bore inspections, root &/or soil excavation, or chemical/biological testing.

(Recommended) Actions (if the tree is to remain): If a tree is to remain and be protected then my recommended actions generally will improve the tree's overall rating to go

<sup>&</sup>lt;sup>1</sup> DBH or dbh: Diameter Breast High is the measurement of the trunk's diameter at 4.5' above ground level (see "Tree SIZE Expressed in Trunk Diameter" in the supporting section, at the end of this letter report)

<sup>&</sup>lt;sup>2</sup>Diameter Tape is used to figure the tree's diameter, by measuring the circumference, where on the inches are premultiplied by 3.14 or  $\pi$  ( $\pi$  called pi) and shown to produce the diameter of the tree directly on the tape.

up one full number rating. If the recommended actions are not taken then the tree may become more of a hazard over time. The measurements, observation, and recommended actions are a "snap-shot" in time and as a living organism; if it is not treated for some minor issues at this time, the lack of action may make the tree much less valuable and more of a potential danger. As the development plans have not been completed at this time, it is not determined which trees will be removed or preserved due to development activities.

## Rating:

Rating is <u>subjective</u> to health and structure = condition. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers<sup>3</sup> and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to zero (the worst condition) as in *Chart A*. The rating was done in the field at the time of the measuring and inspection. The scale is as follows:

No problem ¤	5	excellent
No apparent problem(s)	4	good
Minor problem(s)	3	fair
Major problem(s)	2	poor
Extreme problem(s)	1	dangerous
Dead	0	dead

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## Note:

There is a very important line drawn between a tree rated a 3 and a 2. A rating of 3-4-5 means that the trees are of high enough quality trees to be preserved and protected. A rating of a 0-1-2 is a tree that should be removed and is a liability rather than an asset (except under certain specified circumstances when a 2 rated tree could remain and with the action completed would be re-rated a 3).

### Abbreviation key:

**CC**: Crown clean, to remove crossing branches, broken branches, too densely crowded branches; more of a cleaning process than structural correction

CDL: Codominant leaders, rather than a single leader

EWR: End Weight Reduction pruning

**IB**: Included bark, means bark that is mashed between two or more stems, but the wood (xylem tissue) is not structurally connected

NCP: Needs corrective pruning to improve structure &/or reduce hazard(s)

NP: Not Protected (tree by to small of size &/or an exempt species)

PTB: Prune to balance

RDW: Removed dead wood (1-1/2" and greater in diameter, as this is a potential hazard for people under this limb and a future health problem for the tree)

**TBR**: the tree is <u>To Be Removed</u>, as it is dead, dying, or not repairable with any amount of professional tree care

<sup>&</sup>lt;sup>3</sup> "The Council of Tree & Landscape Appraisers" is a non-membership consortium that represents: American Nursery and Landscape Association, **American Society of Consulting Arborists**, American Society of Landscape Architects, Associated Landscape Contractors of America, Association of Consulting Foresters of America, **International Society of Arboriculture**, and National Arborist Association (I am a member of these organizations in blue).

**UHVL:** Under High Voltage Lines

~: Tilde means no pertinent data to gather and the category is not blank by neglect

# Chart B

Protected in BLUE, Not Protected in Red

	Protect	ed in BLUE, Not P	TOLECTEC					
				DBH in inches (+				
T	Common		# of	extrapolated	Canopy			
Tree Tag#	Name	Botanical Name	Stems	inches)	in feet	Field Notes	Actions	Rating
lag #	Ivanie	Dotalical Name	3,011.5			CDL @ 8 & 12',		
418	Valley Oak	Quercus lobata	1	23	27	IB	RDW	3
419	Valley Oak	Ouercus lobata	1	16	23	CDL @ 12', IB	RDW	3
420	Valley Oak	Quercus lobata	1	20	26	CDL @ 13', IB	RDW	3
421	Valley Oak	Quercus lobata	1	8	11	~	~	4
421	valley Oak	Quereus toodia				IB @ 4', Lens		
422	Valley Oak	Quercus lobata	3	12,7,5= 15	18	to E, NP	~	2
423	Valley Oak	Quercus lobata	1	13	21	IB @ 6-8'	CC	3
723	vuiicy our	Quereno rocara				Typical form,	Remove Water	
424	Olive	Olea europaea	3	10,10,7= 17	20	NP	sprouts	3
424	Olive	Oteu europaea		3,9,8,7,9=		Typical form,	Remove Water	
425	Olive	Olea europaea	5	17	25	NP	sprouts	3
423	Olive	Oteu europaea				CDL @ 5 1/2',		
						typical form,	Remove Water	
426	Olive	Olea europaea	1	14	21	NP	sprouts	3
720	Olive	Orea em opace				CDL @ base,		
				9,11,7,7,5=		typical form,	Remove Water	
427	Olive	Olea europaea	5	19	33	NP	sprouts	3
						CDL @ base,		
						typical form,	Remove Water	
428	Olive	Olea europaea	4	6,7,8,4 = 13	25	NP	sprouts	3
						CDL @ base,		
				2,13,12 =		typical form,	Remove Water	
429	Olive	Olea europaea	3	18	21	NP	sprouts	3
							Remove Water	_
430	Pecan	Carya illinoinensis	1	9	24	CDL @ 10', NP	sprouts	3
						Poor struct-		
			NAME	Name of the last o		ure, too much	TDD	1
431	Chinaberry	Melia azedarach	1	29	17	decay, NP	TBR	1
	American	Liquidambar						_
432	Sweet Gum	styraciflua	1	23	19	~	~	5
433	Pecan	Carya illinoinensis	1	6	12	NP	~	5
	American	Liquidambar				IB @ 7', big		
434	Sweet Gum	styraciflua	1	6	9	scar to SSE, NP		3
435	Pecan	Carya illinoinensis	1	9	17	NP	~	4
						Sun scalded		
		Platanus ×				branches,		
	London Plane	acerifolia				powdery	TOD	
436	'Bloodgood'	'Bloodgood'	1	32	39	mildew, NP	TBR	2

Tree Tag#	Common Name	Botanical Name	# of Stems	DBH in inches (+ extrapolated inches)	Canopy in feet	Field Notes	Actions	Rating
437	Valley Oak	Quercus lobata	1	26	30	~	~	4
438	Almond	Prunus dulcis	1	16	15	CDL @4', NP	~	3
439	Almond	Prunus dulcis	1	~12	~	Decay @ base, stump only, NP	Dead (Cut down)	0
440	Almond	Prunus dulcis	2	6,8 = 10	10	Big Pruning cuts (4-6"), CDL, IB, NP	TBR	1
441	Valley Oak	Quercus lobata	1	31	27	MD to S, 4" x 4", IB,CDL@ 9'	~	3
442	Valley Oak	Quercus lobata	1	27	31	~	~	4

#### Discussion

Point #1: Exemptions for certain species could be a debatable issue, so let me explain the procedure that I utilized... I talked with Nick Lagura, Associate Planner with the City of Citrus Heights on June 18, 2013 at the Citrus Heights City Hall. I questioned him about the exemption for fruit trees and requested if olives and nut trees were classified as "fruit trees" and therefore exempt. He stated that he would use Wikipedia as our defining source to decide if they were a fruit or not. I have attached the 1<sup>st</sup> page from each of the defining section on OLIVES and NUTs in the appendix section (pages 13 &14) of this report. In both cases the trees were planted, established, and maintained on this orchard/farm/ranch property as fruit bearing trees...plus Wikipedia specifically spells out the harvestable organ, the "FRUIT" from fruit trees. The almonds, walnuts, pecans, and olives are considered exempt and not listed, as they are fruit trees.

Point #2: Referring to section about the measurement of multi-stemmed or multi-trunked trees. It is usually a tree with included bark, which is one of the most common point of failure in a larger tree. If a person would add up the total diameters of each of the trunks; the total would be a gross exaggeration of the total square inch area of the trunk. Here is an example to see my point: Interior Live Oak that was cut off and left as a stump sends up multi-stems that later remain to become trunks. Each trunk is 3" in diameter measured at 54" above grade and there are 10 trunks. If these diameter were added together the total diameter would be (3 x 10=) 30 diameter inches. A 30" diameter trunk equals 707 sq in area.

Each 3" diameter trunk has 7 sq inches (rounded to the nearest sq in) of trunk area. All of the 10 trunk areas added together equals 70 sq inches or less than 1/10 the area of the added together trunk diameters! This 70 sq inches is equivalent to one 9" diameter tree. I used the total sum area of all the trunks measured at the DBH point (54" above grade) to produce the extrapolated sized trunk to be fair. If a non-native oak tree's total area equaled 283 sq in or more (19" in diameter) then the tree with multi-trunks counted as a protected tree.

#### Conclusion

There are 9 trees on the site that are the "protected" size and species by the Citrus Heights code.

- 1 of the preserved trees were rated "5" or excellent.
- 3 of the preserved trees were rated "4" or good.
- 5 of the preserved trees were rated "3" or fair.

There are 16 trees that are <u>not</u> protected: too small, exempt species, or rated 0, 1, or 2 and should be removed without any requirements for mitigation.

This process of development has not been determined prior to this arborist report, as this report will help determine the location of the best trees to save, trees that need to be removed for practical and reasonable development, and which trees that are to be preserved throughout the design, development, and sales of the properties.

The trees to remain can thrive and do well, as they have for decades in the past with only natural, seasonal, rain water. Many of the trees will do poorly when soil grades are changed, roots are cut off, covered over, compacted, and exposed to frequent watering durations (irrigation) in the summer. The TPZ or CRZ fencing around the trees to remain is critical to keep all vehicles, people, and equipment out of these areas below the trees. There shall be no dumping, grubbing, storage, grading, irrigation, trenching within the exclusionary zones of the trees to remain.

It is important to plan well by removing the trees that are not destine to remain, giving room to build new structures and connecting the structure with new infrastructure to existing streets and walks. The remaining trees can grow for decades or centuries if given the proper space and not destroying the soils capacity to support these protected trees.

It is also important to plan the landscaping and irrigation system to not cause fungal problems like *Armillaria mellea*, by utilizing a plant pallet and irrigation system that is specifically designed for these conditions around the trees to remain. There is an important symbiotic relationship between the tree and good fungus in the soil. Adding a 4-6" layer of hardwood mulch (NOT redwood or cedar bark) to the soil (without a weed cloth separating the soil fungus from the organic layer) within the TPZ, will help: maintain more optimal temperatures, improve soil pH (making it more acidic, favored by oaks), add needed organic matter to the soil, reduce soil compaction, plus improve drainage and aeration. A soil test is required before a new landscape is developed to understand what soil amendments are needed to improve the soil for any new plants that are intended to be planted here.

Liming is a practice often used during the construction period to help stabilize the soil if seems too wet for large grading equipment. Do not lime this soil, as the change in pH (to a more alkaline condition) as it can greatly reduce the viability and vigor of these native oaks and other acid loving plants or trees (or even cause their death). Also do not use crushed limestone as a base rock for paving around oaks, as this too can alter the soil pH similar to liming, just in a slower reaction time.

Any pruning, cabling, or tree work shall conform to ANSI A300 Standards for Tree Care and should be performed by a qualified International Society of Arboricultural Certified Arborist.

The trees that have multi-stems (trunks) are not to have their trunk diameter added together as a diameter total, but rather figure the square inch area of each trunk, added together to come to a total square inch area. This area will then be converted (and rounded to the nearest diameter inch) of the closest hypothetical (extrapolated) trunk size that is representative of the same trunk area.

## Conclusion

If trees are to remain and be preserved, then proper care shall be required to keep all construction activities from occurring within the CRZ or TPZ by having 4' high, bright-orange tree protection fencing installed 100% around the CRZ or TPZ. Any trees or pruned branches of the trees to be removed shall be chipped or tub ground and stored on-site to be used as wood chip mulch under the trees to remain and spread to a maximum depth of 4-6" (initially), settling to a 2-4" depth.

If the TPZ or CRZ in encroached upon, it can be okay if only by 20% of less...as long as there are other areas the same sized area for the same tree where the roots outside of the TPZ/CRZ can be retained. If more that the 20% of the TPZ/CRZ is destroyed, then mitigation will be calculated for that tree.

#### Recommendations

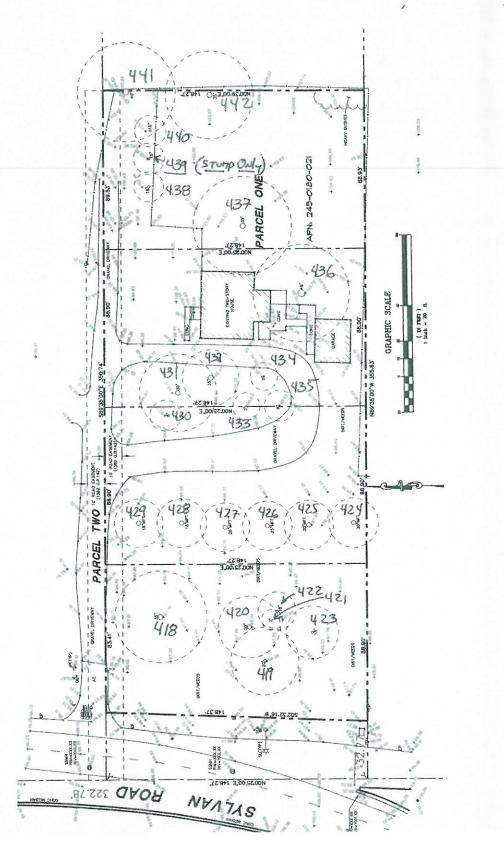
- Carefully remove the trees that are not to remain per the tree site map (to be determined)
- Fence and add proper signage as required around all trees to remain and be protected
- ► Maintain the TPZ/CRZ fencing and signs during all phases of development
- ▶ Prune & cabling all other trees to remain per ANSI A300 Standards by an ISA Certified Arborist
- ▶If any live roots or branches 2" in diameter or greater are damaged or are to be cut on a tree to be preserved and protected, it shall be by an ISA Certified Arborist
- ▶ Minimize the size of any pruning cuts, best if less that 3" in diameter
- ▶ Minimize the amount of pruning, as the VERY maximum in any year period should be 20%
- ▶ Chip or grind all of the removed trees & branches for mulch and retain on-site for re-use
- ▶ Do not disturb the fenced areas (unless you contact the City & project arborists first) for permission
- ► Add 4-6" hardwood chip under all trees to remain and be protected
- ▶Do NOT solely use redwood or cedar bark as mulch, it does not become a beneficial part of the soil
- ▶ Do NOT use weed barrier cloth between the mulch and the soil
- Summering watering of existing trees can be beneficial during construction, 1x/month June-October
- Add plants that are known to thrive in conjunction with these existing trees to remain
- ▶ Plan, install, and operate your irrigation system to protect these existing trees
- ▶Minimally use herbicides and pesticides (practice IPM and avoidance) to minimize chemicals & cost

If I can be of further assistance or if you have any arborist related questions...please contact me as soon as possible. If you have any questions about this report or any details about my observations, conclusions, or recommendations...please contact me at any time.

### Kenneth Menzer

Senior Consulting & ISA Certified Arborist #WE-2122AM



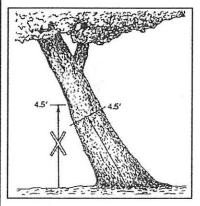


Tree Site Map (NTS)

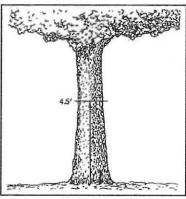
# Tree SIZE Expressed by Trunk Diameter

"The height at which the trunk diameter of a tree is measured depends upon its size. The American Standard for Nursery Stock (ANSI, 1990) state that measurements shall be taken 6 inches (15 cm) above the ground for trunk diameters up to and including 4 inches (10 cm). Larger trees (assumed, but not stated, to be of transplantable size) are to be measured at 12 inches (30 cm). Trees normally considered too large to transplant are to be measured 4.5 feet [4'-6" is also called diameter breast high or dbh] (1.4 m) above the ground. Trees, like conifers, which have branches below 4.5 feet should be measured at a height that most effectively represents the size of the tree. "The diameter is calculated by first measuring the circumference divided by 3.14 ( $\alpha$  called pi) or by using a "diameter tape" whereon the inches are multiplied by  $\alpha$  and shown to produce the diameter directly.

This is the dbh standard for measurement as shown in figure 4-2.



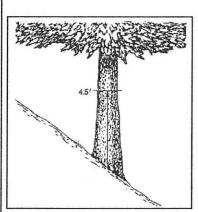
Figures 4-3 (top) and 4-4 (bottom). In each case, the trunk circumference should be measured at right angles to the trunk 4.5 feet (1.4 cm) along the center of the trunk axis so the height is the average of the shortest and longest sides of the trunk.

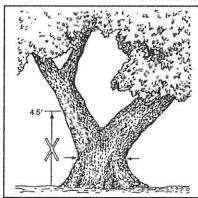


Figures 4-2. Trees with fairly straight, upright trunks with the lowest branch arising on the trunk higher than 6 feet (1.8 m) above the ground should be measured at 4.5 feet (1.4 m).

There are some exceptions to the dbh standard as shown in the figures 4-3, 4-4, 4-5 & 4-6.

Figure 4-6. In a multi-stem tree, measure the trunk circumference of each trunk at 4.5 feet (1.4 m) above the ground. The area of each trunk is determined and then added together to obtain a trunk area that is representative of the size of the tree and each of the stems contribute its proportionate share to the canopy.





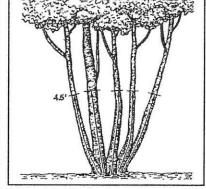


Figure 4-5. When low branches preclude measuring the trunk at 4.5 feet (1.4 m) measure the smallest circumference below the smallest branch. In this example, an alternative would be to determine the sum of the cross-sectional areas of the two stems measured about 12 inches (30 cm) above the crotch; then average the sum of the two branch areas and the smallest cross-sectional area below the branches. This may give a better estimate of tree size. Record the height of measurement(s) and the reasons the height or those heights were chosen.

ABACUS
Where Every Detail Counts\*

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Tree SIZE Expressed by Trunk Diameter

Scale: NTS

Drawing: TSE

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Olive - Wikipedia, the free encyclopedia

## Olive

Prom Wikipedia, the free encyclopedia

The olive (%) "oliv/ or %' "a : lavi, Olea europaea, meaning "Oil from/of Europe") is a species of small tree in the lumity Oleacene, native to the coastal areas of the eastern Mediterranean Basin as well as northern lung, and northern Iran at the south of the Caspian Sea.

Its fruit, also called the olive, is of major agricultural importance in the Mediterranean region as the source of olive oil. The tree and its fruit give its name to the plant family, which also includes species such as libraes, jasmine, Forsythia and the tron ash trees (I revinus). The word derives from Latin atrea which is cognate with the Greek Exala (elaia) <sup>142</sup> ultimately from Myconacan Greek FIFT e-ra-wa ("elaiwa"), attested in Linear B syllabic script. <sup>1514</sup> The word "oil" in multiple languages ultimately derives from the name of this tree and its fruit.

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# Olive Tree Olea europaea



Oten europeana, Dood Sen, Jordan

### Scientific classification

Kingdom: Photae (unrunked): Angiosperms

(unranked): Endicots
(unranked): Asterids

Order: Lamiales
Family: Olenceae

Genus

Species: O. europaea

Binomial name Olea europasa

Olaa

## Description



19th century iffestration

The office tree, Olea suropaea, is an evergreen tree or shrub native to the Mediferranean, Asia and Africa. It is short and squat, and rarely exceeds 8–15 metres (26–49 ft) in height. However, the Pisciontaina, a unique variety comprising 40,000 trees found only in the area around Piscionta in the Campania region of southern Italy often exceeds 8–15 metres (26–49 ft) with correspondingly large trunk diameters. The stivery green leaves are oblong, measuring 4–10 centimetres (1.6–3.9 in) long and 1–3 centimetres (0.39–1.2 in) wide. The trunk is typically gnarled and twisted.

The small white, feathery flowers, with ten-drift cally and enrolls, two stumens and bitld stigms, are home generally on the previous year's wood, in racemes springing from the axils of the leaves.

The finit is a small drope 1–2.5 continectres (0.39–0.98 in) long, thinner-fleshed and smaller in wild plants than in orchard cultivars. Olives are harvested in the green to purple slage. Canned black olives may contain chemicals (usually ferrous sulfate) that turn them black artificially.

Olea curopaea contains a seed community referred to in American English as a pit or a rock, and in British English as a

http://en.wikipedis.org/wiki/Olive

6/18/2013

Nut (fruit) - Wikipedia, the free encyclopedia

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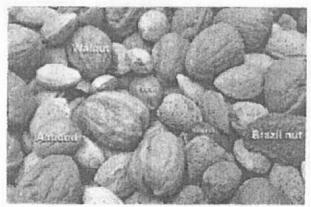
# Nut (fruit)

From Wikipedia, the free encyclopedia

A nut is a fruit composed of a hard shell and a seed, where the hard-shelled fruit does not open to release the soad (indehiscent). So, while, in a culinary context, a wide variety of dried seeds are often called nuts, in a botanical context, only ones that include the indehiscent fruit are considered true nuts. The translation of "nut" in certain languages frequently requires paraphrases as the concept is ambiguous.

Most seeds come from fruits that naturally free themselves from the shell, unlike nuts such as hazelnuts, chestnuts, and acoms, which have hard shell walls and originate

from a compound ovary. Culmary usage of the term is tess restrictive, and some nuts as defined in food preparation, like pistachios and Brazil nuts. [11] are not nuts in a botanical sense. Common usage of the term often refers to any hard-walled, edible kernel as a put. [2]



Some common 'nurs', including walnuts, hazelnuts, Brazil nuts, pecans, and almands.



- 1 Botanical definition
- 2 Culinary definition and uses
- . 3 Nutritional benefits
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Hazelauts from the Common Hazel

## **Botanical** definition

A not in botany is a simple dry fruit with one seed (rarely two) in which the overy wall becomes very hard (stony or woody) at maturity, and where the seed remains attached or fused with the overy wall. Most not come from the pistils with *inferior* overies (see flower) and all are *indehisteri* (not opening at maturity). True nots are produced, for example, by some plant families of the order Fagales.



Chestnuts

https://en.wikipedia.org/wiki/Nut (fruit)

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- I, Kenneth Menzer, of "ABACUS", did personally inspect the site and investigated the tree(s) as mentioned in this report and I performed all aspects of this report unless noted otherwise in the report. Data input by Cherie Menzer.
- 2) We have neither financial interest in the tree work that may or may not be done, nor financial interest in the property where the tree(s) is (are) located unless noted within the report.
- 3) All opinions and recommendations expressed herein this report are ours solely. We have used our specialized education, knowledge, training and experience to examine the tree(s) and to make our opinions and recommendations to enhance the beauty; health and longevity, with an attempt to reduce the risk of who and/or what is near these trees. We cannot guarantee or warranty that a tree will not be healthy or safe under all circumstances, nor for a specific period of time or that problems may not arise in the future.
- 4) Our report with its opinions and recommendations are limited to the tree(s) inspected.
- 5) We attempt to be cognizant of the whole scope of a project, but many matters are beyond the scope of our professional consulting arborist services such as: exact property boundaries, property ownership, site lines, easements, codes, covenants & restrictions (CC&Rs), disputed between neighbors, and other issues.
- 6) We rely on the information disclosed to us and assume the information to be complete, true, and accurate.
- 7) The inspection is limited to visual examination of accessible items of the tree(s), from the ground unless otherwise noted, without excavation, probing, boring, or dissection, unless noted otherwise. Only information covered in this report was examined, and reflects the condition of those inspected items at that specific time.
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Signed:			