

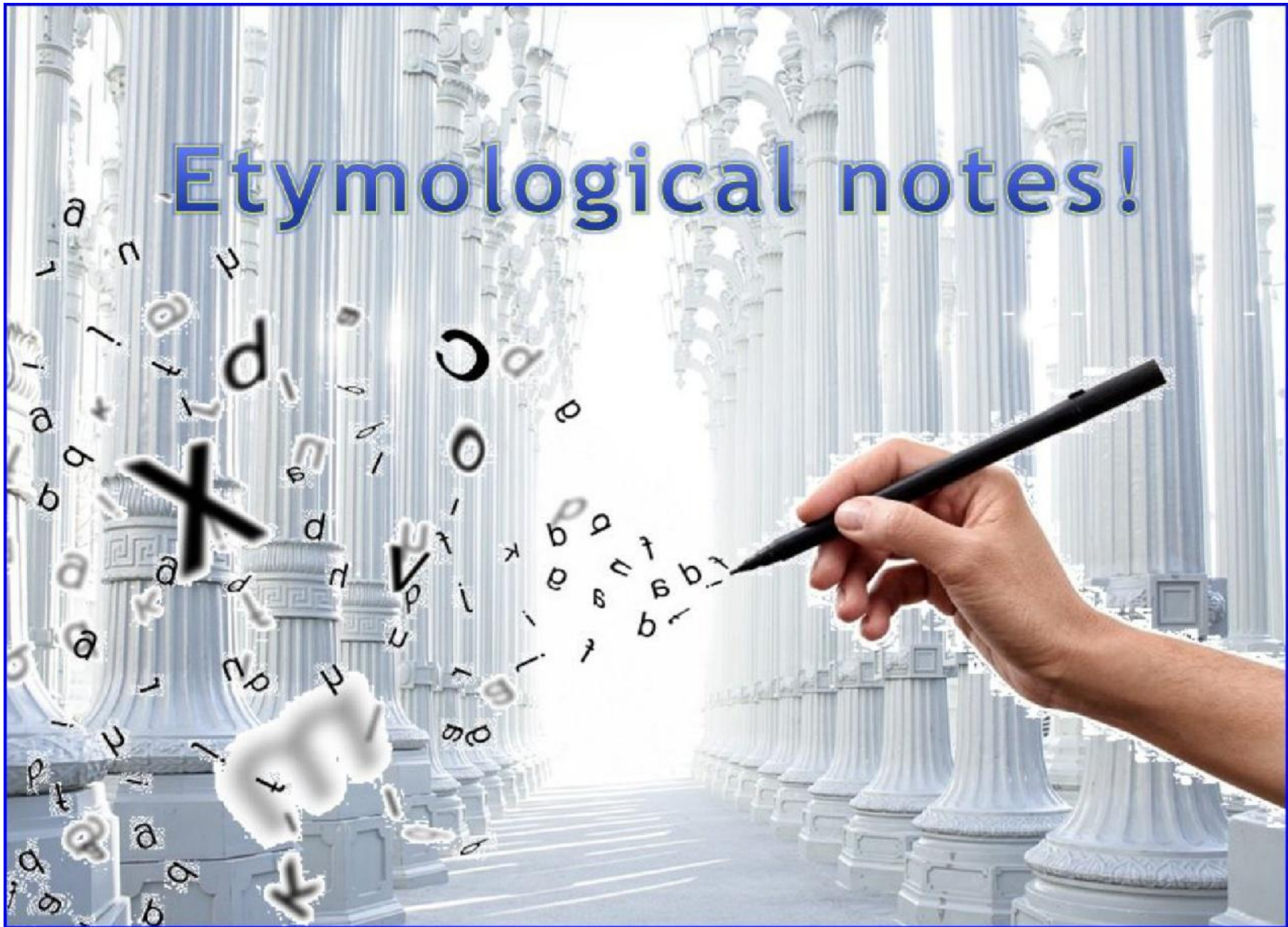


## **Herbs and wellness: Medicinal plants of Amorgos and Gastronomy**

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# Etymological notes!







# Etymology=Etymos+logos

.the truth about the origin  
of the word

**Etymos** = true

**Logos**= speech, rational principle  
in Ancient Greek philosophy



«**Φυτόν**» (Phyton, plant)  
 (the corresponding words in scientific  
 latin and english terminology as a  
 prefix or as a suffix are «**phyt-**»,  
 «**phyto-**», «**-phyton**», «**-phyte**», «**-  
 phyta**», «**-phytic**»):

From the verb “**φύω**” (I grow up) in  
 which “**ύω**” means “rain”, and by  
 converting daseia (a sign in Greek  
 indicating the presence of an aspirate)  
 into the letter **φ**, is converted into the  
 verb “**φύω**”, because plants need rain  
 to grow.

**φύω** παρατ. *έφυον*, Επικ. γ' ενικ. *φύειν*, μέλ. *φύσει* [σ], αόρ. α' *έφουσα* —  
 Μέσ., μέλ. *φύσομαι*, αμτβ. Ενεργ. χρόνοι, παρακ. *πέφυκα*, Επικ. γ' πληθ.  
*πεφύκασι*, Επικ. μτχ. θηλ. *πεφυκία*, αιτ. πληθ. *πεφυκώτας*, υπερσ.  
*έπεφυκειν*, Επικ. *πεφυκειν*, Επικ. γ' πληθ. *έπέφυκον* αόρ. β' *έφυν* (όπως  
 από *φύμι*), Επικ. γ' ενικ. *φύ*, γ' πληθ. *έφυμι* (αντί *έφουσαι*, που είναι επίσης  
 γ' πληθ. του αορ. α'), γ' ενικ. ευκτ. *φύη* ή *φύη*, απαρ. *φύμαι*, Επικ.  
*φύμηναι*, μτχ. *φύς*. Έπειτα έχουμε Παθ. αόρ. β' *έφρην*, υποτ. *φυνώ*, -ή,  
 -ώσι.  
 Α. Ι. Ι. Μτβ. σε Ενεργ. ενσot., μέλ. και αορ. α' **βγάζω**, **παράγω**, **κάνω**  
**να φυτρώσει**, κ.λπ., σε Όμηρ. κ.λπ. ομοίως, *τριχάς έφύσει*, έκανε τα  
 μαλλιά να μεγαλώσουν, σε Όμηρ. Οδ.· λέγεται για χώρα, *φύειν καρπόν  
 τε και άνδρας*, σε Ηρόδ. 2. λέγεται για ανθρώπους, γεννώ, παράγω,  
 δημιουργώ, Λατ. *procreare*, σε Ευρ. κ.λπ.· *ό φύσας*, ο δημιουργός,  
 πατέρας (αντιθ. προς *ό φύς*, ο γιος, βλ. κατωτ. Β. Ι. 2), σε Σοφ.· λέγεται  
 και για τους δύο γονείς, *οι φύσαντες*, σε Ευρ.· μεταφ., *ήδ' ήμέρα φύσει σε*,  
 θα έρθας στο φως με τη γέννηση, σε Σοφ.· *χρόνος φύσιάδηλα*, στον ιδ. 3.  
 λέγεται για ανθρώπους σε σχέση με την ανάπτυξη του σώματός τους,  
*φύω πύργωνα*, μεγαλώνω ή βγάζω γένια, σε Ηρόδ.· *φύω πτερά*, σε  
 Αριστοφ.· απ' όπου, το αστείο *φύειν φράττερας*, βλ. **φράττηρ**. 4. μεταφ.  
*φρένας φύειν*, αποκτώ μυαλό, σε Σοφ.· *δόξαν φύειν*, αποκτώ μεγάλη ιδέα  
 για τον εαυτό μου, σε Ηρόδ. ΙΙ. απόλ., **βγάζω βλαστάρια**, *άνδρών  
 γενειή ή μέν φύει ή δ' απολύγει*, μια γενία παράγει βλαστάρια, η άλλη  
 παύει να το κάνει, σε Όμηρ. Ιλ.· *δρυες φύοντι*, σε Θεόκρ. Β. Ι. Ι. Παθ. με  
 αμτβ. Ενεργ. χρόνους, βλ. αορ. β', παρακ. και υπερσ., αναπτύσσομαι,  
 φύω, φυτρώνω, μεγαλώνω, σε Όμηρ. Οδ.· *φύεται αυτόματα ρόδα*, σε  
 Ηρόδ.· ομοίως, *τού κέρα εκ κεφαλής έκαίδεκάδωρα πέφυκει*, από το  
 κεφάλι του είχαν φυτρώσει κέρατα μήκους δεκαέξι παλαίων, σε  
 Όμηρ. Ιλ., Πλάτ.· *των φύτων αίτιος*, ο αίτιος, ο δημιουργός των  
 πραγμάτων που φυτρώσαν, σε Δημ. 2. λέγεται για ανθρώπους,  
 γίνομαι ή γεννιέμαι, κυρίως συχνό σε αορ. β' και παρακ.· *ό Λωφρήσων ου  
 πέφυκε πω*, θα καταργήσει αυτό που δεν γεννήθηκε ακόμα, σε Αισχύλ.·  
*μη φύσαι μικά*, φαίνεται καλύτερο να μην έχει γεννηθεί κανείς, σε Σοφ.  
 κ.λπ. ΙΙ. 1. ο παρακ. και μερικές φορές ο αορ. β' έχουν σημασία ενσot.,  
 είμαι από τη φύση μου τέτοιος ή τέτοιος, *πέφυκε κακός, σαρρός*, σε Τραγ.  
 κ.λπ. ομοίως, *οι καλώς πεφυκότες*, σε Σοφ.· έπατα, απλά είμαι τέτοιος ή  
 τέτοιος, *έφυς μήτηρ θεού*, σε Αισχύλ.· *απλοός ό μύθος τής αληθείας έφυ*,  
 σε Ευρ. 2. με απαρ., είμαι από τη φύση κατάλληλος, ικανός να πράξω  
 έτσι και έτσι, *έφυνπράσσειν*, σε Σοφ.· *φύσει μη πεφυκότεα τοιαύτα φεσινείν*,  
 δεν είναι προικισμένα από τη φύση ώστε να μιλούν, στον ιδ.· *πέφυκασι  
 άμαρτάνειν*, σε Θουκ. 3. με πρόθ., *φύμαι επί δακρύοις*, είμαι από τη φύση  
 μου επιρρηπής στα δάκρυα, σε Ευρ.· *πεφυκώς πρός άρετήν*, σε Ξεν. 4. με  
 dot., τυχαίως σε κάποιον από τη φύση, είμαι ο φυσικός κληρός κάποιου,  
 με απαρ., είναι φυσικό να κάνω, σε Αριστ.· απόλ., *ώς πέφυκε*, όπως είναι  
 φυσικό, σε Ξεν.





Etymologically, the word "Gastronomy" comes from the ancient greek word «**γαστήρ - γαστέρα**» which in Greek means many different things, as you can see right now.

According to the best ancient greek dictionary "Liddell-Scott":  
"γαστήρ - γαστέρα" means "abdomen", "stomach", "uterus".



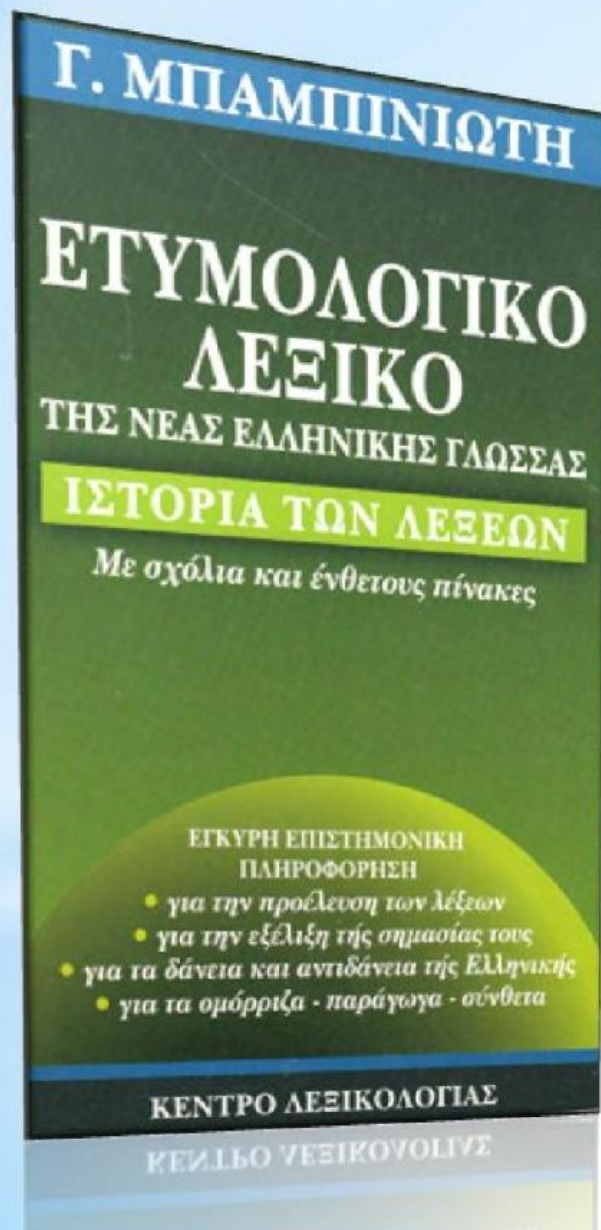


**γαστήρ**, ἡ, γεν. -έρος, κατὰ συγκοπ. γαστρός· δοτ. πληρ. γαστράσι. **Κοιλία**, τὸ ὑπογάστριον, Λατ. venter, Ὅμ., κτλ.· ἐντεῦθεν, γ. ἀσπίδος, τὸ κοῖλον αὐτῆς, Τυρταί. 11. 24· — ἡ κοιλία ἢ τὸ ἐξωγκωμένον μέρος ἀγγείου, Meineke Κρατῖν. Πυτ. 18· τὸ μέσον ἔχει τὸ σαρκῶδες μέρος μυός, Γαλην. 5. 366. **2) ὁ στόμαχος** ὡς ἐπιζητῶν τροφήν, κέλεται δέ ἐ γαστήρ Ὁδ. Ζ. 133· γαστέρι δ' οὐ πως ἔστι νέκυν πενθῆσαι, δηλ. διὰ τῆς νηστείας, Ἰλ. Τ. 225· ἐν γαστρός ἀνάγκαις Δίσχυλ. Ἀγ. 726· — πρὸς ἔκφρασιν λαϊμαργίας, γαστέρες οἶον Ἡσ. Θ. 26· γαστέρες ἀργαί Ἐπιμην. ἐν τῇ πρὸς Τίτ. ἐπιστολ. α'. 12· γαστρός καὶ ποτοῦ Ξεν. Κύρ. 1. 2, 8· γαστρός ἐγκρατῆς, κύριος τῆς κοιλίας αὐτοῦ, ὁ αὐτ. Ἀπομν. 1. 2, 1· ἀντίθ. τῷ γαστρός ἤπτων αὐτόθι 1. 5, 1· γαστρί δουλεύειν ἢ χαρίσασθαι, εἶναι δούλος τῆς κοιλίας του, αὐτόθι 1. 6, 8., 2. 1, 2· γαστρί δελεάζεσθαι αὐτόθι 2. 1, 4· τῇ γαστρί μετρεῖν τὴν εὐδαιμονίαν Δημ. 324. 25· τὰς γαστρός φεῖδεσθαι, κωμικὴ ἔκφρασις προκειμένου περὶ τινος, ὅστις δὲν ἔχει νὰ φάγη τι, Θεόκρ. 21. 41. **3) ὁ στόμαχος τῶν ζῴων** πεπληρωμένος μὲ λεπτοκομμένον κρέας καὶ αἷμα κατὰ τὸν τρόπον τῶν ἀλλάντων (πρβλ. φύσκη), Ὁδ. Σ. 41. 118., Γ. 25, Ἀριστοτ. Νερ. 409, πρβλ. γαστρίον· — ἐντεῦθεν γαστροπτης, ου, ὁ ἀναπερόμενος μεταξὺ τῶν μαγειρικῶν σκευῶν, Πολυδ. Γ', 105. **II. ἡ μήτρα**, Λατ. uterus, ἐντινα γαστέρι μήτηρ .. φέροι Ἰλ. Ζ. 58· ἐκ γαστρός, ἐκ τῆς μήτρας, ἐκ μικρᾶς ἡλικίας, Θεόγν. 305· ἐν γαστρί ἔχειν, ἐγκυον εἶναι, ἐγκυμονεῖν, Ἡρόδ. 3. 32· φέρειν Ἠλύτ. Νομ. 792E· ἐν γ. λαβεῖν, συλλαβεῖν ἐν τῇ κοιλίᾳ, Ἀριστ. Ἴστ. Ζ. 9. 50, 8· — ὡσχύτως, γυνὴ ἐπτά ἤδη γαστέρας δυστο-

Here is... the greek evidence!







**Γαστέρα** = abdomen, homeric word

We find it in Homer's Odyssey

*"...for hunger pinched their bellies"*

(Όδ. Δ´, 369: *έτειρε δε γαστέρα λιμός= εθέριζε τα σπλάχνα τους η πείνα*)

#### ΣΗΜΑΣΙΟΛΟΓΙΚΗ ΠΑΡΑΤΗΡΗΣΗ

##### **γαστέρα, γάστρα**

Οι αρχ. ομόρριζες λέξεις **γαστήρ** και **γάστρα** αναφέρονταν σε σώματα ή αντικείμενα κοίλου σχήματος. Ειδικότερα, η λ. **γάστρα** δήλωνε κυρίως κοίλα αντικείμενα και δοχείο, καθώς και αρχιτεκτονικά μέρη τέτοιου τύπου, ενώ η λ. **γαστήρ** είχε περιοριστεί σε μέρη ταύ σώματος που ταίριαζαν σε αυτό το σχήμα. Αυτό εξηγεί γιατί η λ. **γαστήρ** δήλωνε κατ' εξοχήν τη «μήτρα» και την «κοιλιά» (που καταναλώνει την τροφή).

##### **γαστρίμαργος** «λαίμαργος»

αρχ. [ήδη στον Πίνδαρο τον 6ο / 5ο αι. π.Χ.] < γαστρί- (< γαστήρ «κοιλιά») + μάργος «τρελός – αδηφάγος», γιο το οποίο βλ.λ. **λαίμαργος**.

##### **ΕΤΥΜ. ΠΕΔΙΟ**

**γαστριμαργία** < αρχ. γαστριμαργ-ία

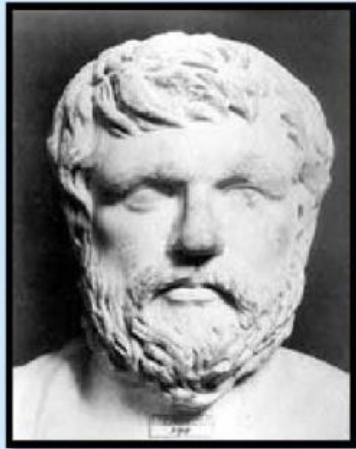
**γαστριμαργικός** < ελνστ. γαστριμαργ-ικός.

**λαααβιθαβλικός** < εγλασ' λαααβιθαβλ-ικός

**λαααβιθαβλία** < αβχ' λαααβιθαβλ-ία

**ΕΙΛΑΜ' ΜΕΝΙΟ**





The first cookbook in history was written in 330 B.C by the greek poet and philosopher Archestratos from Syracuse.

He is considered to be the father of gastronomy.

**γαστρο-λογία**, ἡ, ποίημα γραφέν ὑπὸ τοῦ ὀψοδαϊδάλου Ἀρχε-  
στράτου, περιέχον κανόνας καὶ ὁδηγίας πρὸς θεραπείαν τῆς κοιλίας,  
Ἰθύν.104B, 278B· ἀναφέρεται δὲ καὶ ὑπὸ τὸ ὄνομα **γαστρονο-**  
**μία**, ὀψοποιεῖα, **ἡδυσπάθεια**, ὁ αὐτ. 4E, 56C, 40C, 310A.

## Some definitions...

The word **gastronomy** means:

-knowledge about food<sup>1</sup>

-intelligent knowledge of whatever concerns man's nourishment<sup>2</sup>

**Gastronomic Botany**: use of plants, algae and fungi in food<sup>3</sup>

**Molecular gastronomy** is a scientific discipline that looks for the mechanisms of phenomena occurring during dish preparation and consumption<sup>4</sup> as well as for the changes experienced in processing food.

### References:

<sup>1</sup>•This H: *Molecular gastronomy is a scientific discipline, and note by note cuisine is the next culinary trend.*  
This Flavour 2013: 2:1.

<sup>2</sup>•Brillat-Savarin JA: *Meditation III. De la gastronomie.* In *Molecular Gastronomy*, This H. New York: Columbia University Press; 2006.

<sup>3</sup>•A. Avalos Garcia et al. : *Gastronomic Botany and Molecular Gastronomy.* Proceedings of ICERI2011 Conference.  
14<sup>th</sup> -16<sup>th</sup> November, Madrid, Spain.

<sup>4</sup>•This H: *La gastronomie moléculaire.* Sciences des aliments 2003, 23 (2):187 - 198.  
•This H: *La gastronomie moléculaire et physique.* In PhD thesis. Paris: VI University; 1995.



**Gastronomy** is a cultural object changing over time based on several factors:

1. The raw materials (animal and plant) that man could be found naturally in the environment.
2. **The knowledge passed on the properties of some of those raw materials.**
3. The availability of them.
4. The methods and techniques that are processed for consumption.
5. The introduction of new raw materials, which came to be grown or raised in specialized areas.

•A. Gómez et al.: *New approach to Gastronomy from Bioeconomy and academic activity*. Proceedings of EDULEARN12 Conference. 2<sup>nd</sup>-4<sup>th</sup> July, Barcelona, Spain.

During food preparation, plant or animal tissues are at least washed and cut, and most food are thermally processed. For example, even for a simple carrot salad, which requires no thermal processing, **there is a big difference between the raw product in the field and what is consumed** - that is, grated carrots on a plate: **this is because cutting the tissue triggers enzymatic reactions and because compounds get transferred between the dressing and the plant tissue.**

References:

- Zawistowski J, Biliaderis CG, Eskin NAM: *Polyphenoloxidase*. In *Oxidative Enzymes in Food*. Edited by Robinson DS, Eskin NAM. London: Elsevier Applied Science; 1991:217 - 273.
- Cazor A, This H: *Sucrose, glucose and fructose extraction in aqueous carrot root extracts prepared at different temperatures by means of direct NMR measurements*. J Agric Food Chem 2006, 54:4681 - 4686.





It should be noted that it is completely different to take a **plant as a medicine** [decoction, infusion or as a commercial dietary supplement, as part of an alternative or complementary method of treatment (in this case we have in condensed mode the useful components of the plants)] and of course different to take a **plant itself as food or in a meal.**





Plants themselves either in nature or in our kitchen as food, have **common** chemical compounds and properties, but there are also **differences** in both their qualitative and quantitative composition.





The chemical compounds of the plants and their pharmacological-therapeutic, as well as organoleptic properties (in case of cooked foods), depend on **several factors**:

1. on the **altitude** (how many meters above the surface of the sea a plant grows) and the **habitat**
2. on the geographical area: **geographical variation-differentiation**





**3. Interpopulation variability-differentiation**  
(occurring between or involving  
two or more distinct populations)

**4. Intrapopulation variability-differentiation**  
(occurring within or taking place  
between members of a population)

**from** population **to** population  
(**interpopulation**)  
and within **the same** population  
(**intrapopulation**),  
we have variations in chemical  
components and therefore in  
pharmacological and organoleptic  
properties of the plants (foods).





**5. Diurnal** variation-differentiation:

- the variability of output or excretion of a substance during the day versus the night or over a 12-hour interval.
- expected high and low levels of a substance during a 24-hour period.

**6. Seasonal** variation-differentiation: plants of the same population at the four seasons of the year differ in their chemical components and pharmacological - organoleptic properties.

**7. Cultivated** versus **wild-indigenous** plants: there is a distinction between cultivated and wild-indigenous plant species, with regard to their chemical components and pharmacological - organoleptic properties.



# *Crithmum maritimum* L. (Kritamo)





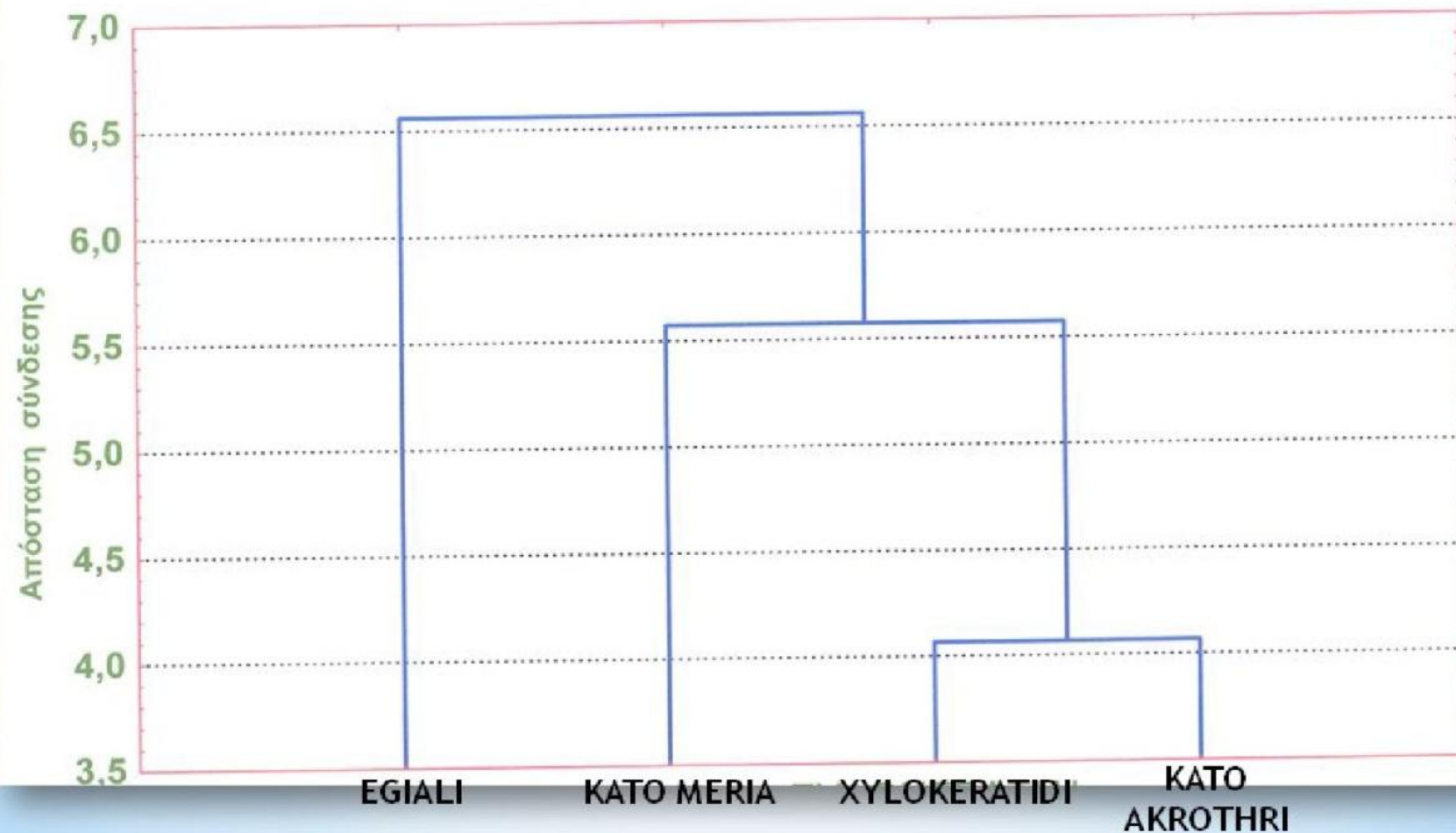


E. KATSOURI, C. DEMETZOS, **PERDEZOGLOU D.**, M. GAZOULI, L. TZOUVELEKIS. An interpopulation study of the essential oil of various parts of *Crithmum maritimum* L. growing in Amorgos island (Greece). 47<sup>th</sup> Annual Congress of the Society for Medicinal Plant Research (2000 Years of Natural Products Research - Past, Present and Future). 26-30.7.1999, Amsterdam.

KATSOURI E., DEMETZOS C., **PERDEZOGLOU D.** & LOUKIS A. (2001). An interpopulation study of the essential oils of *Crithmum maritimum* L. growing in Amorgos (Greece). *Journal of Essential Oil Research* 13:303-308

**According to Hippocrates, Dioskouridis and Pliny:  
diuretic, tonic, against scurvy.**

## RESULTS OF STATISTICAL ANALYSIS OF THE ESSENTIAL OIL



**Geographical differentiation of the populations  
of the same botanical species (plant)**





*Seasonal differentiation*



What we buy in the popular market, in super markets, also in greengrocer's, even organic farming plants, they have in some way different chemical composition and properties than the corresponding wild-indigenous plants, used as medicines or as foods.



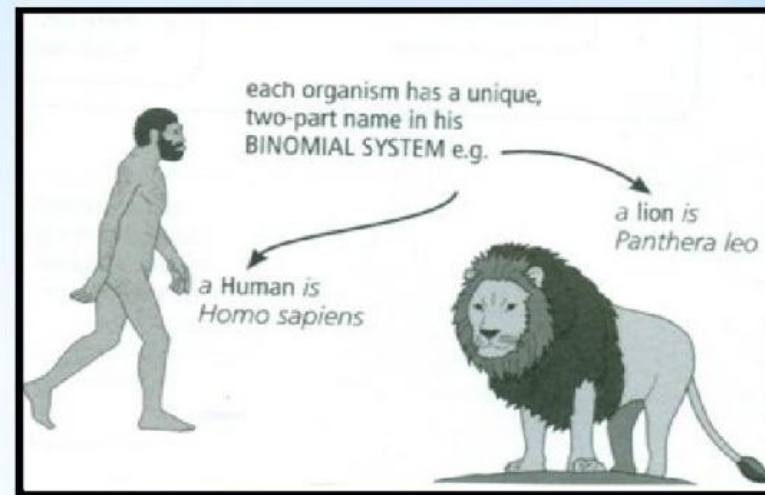
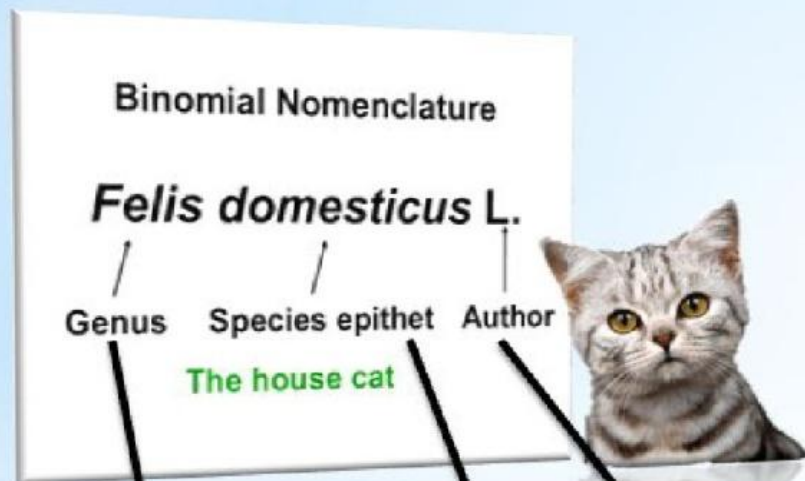


# Plant Interactions



- Plant-plant interactions
- Plant-drugs interactions
- Plant-dietary supplements interactions

when  
taken together

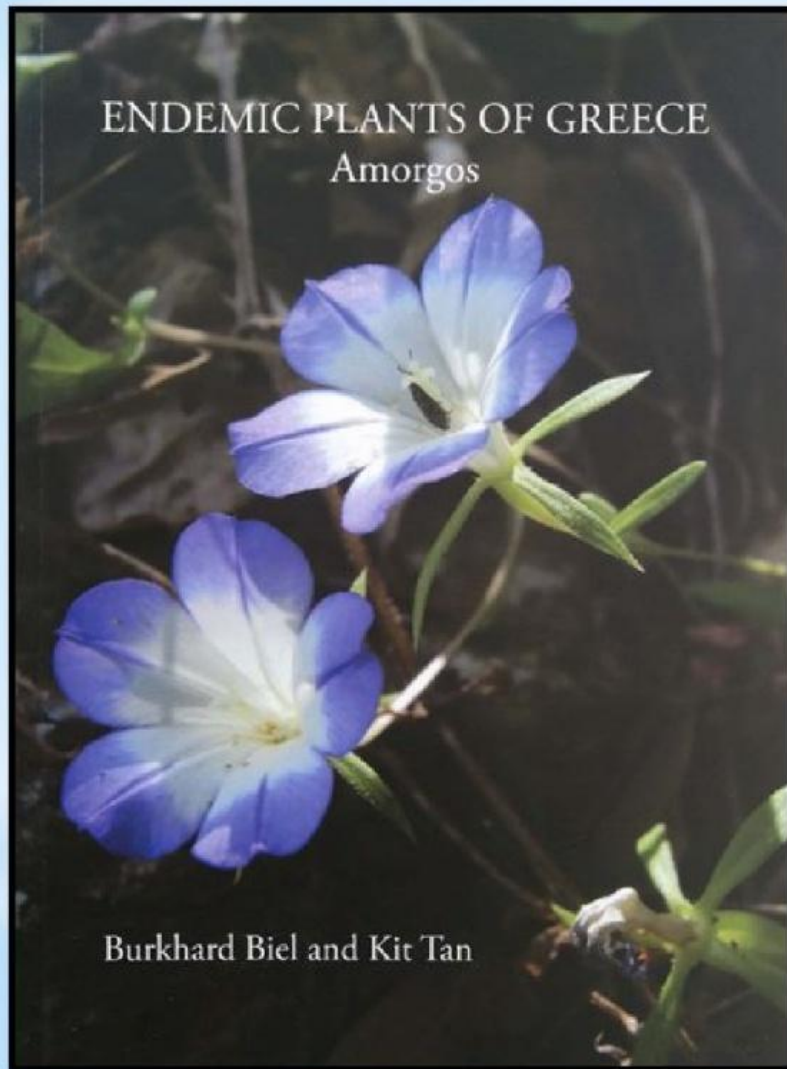


**Hypericum perforatum L.**

St. John's wort  
 Υπερικόν το διάτρητον  
 ή κοινώς βάλσαμο, βαλσαμόχορτο







Approximately  
1100 taxa (species and subspecies)  
are currently recorded from the island.  
Many of them are typically  
Mediterranean plants and widely distributed in Greece.

On Amorgos 28 greek endemic taxa are occurring, but  
only two of them are local endemics (only on Amorgos)  
*Erysimum senoneri* subsp. *amorginum* and  
*Symphytum davisii* subsp. *davisii*  
and twenty-six other Greek endemics  
occurring on Amorgos  
(they appear on Amorgos as well as in the rest of Greece,  
but not beyond the geographic boundaries of Greece).

**At the moment we do not know, from scientific  
point of view, the precise number  
of medicinal plants on Amorgos.**

## What are medicinal plants?

- Generally medicinal plants refer to using a plant's seeds (**semen-semina**), berries (**fructus-fructus**), underground parts of the plant-roots (**radix-radices, bulbus, tubera, rhizoma-rhizomata**), leaves (**folium-folia**), bark (**cortex**), flower, -s (**flos, flores**), wood (**lignum**) or the aboveground parts of the plants (**herba**) for medicinal purposes, in curing diseases.

Scientifically medicinal plants are plants (usually parts of them) that have a recognized clinical medical use (very high level of reliable clinical evidence). Their use ranges from the production of mainstream pharmaceutical products to herbal medicine preparations.





Some traditional foods with medicinal plants (in greek)	Greek/english popular names of the constituent plants <sup>1</sup>	Scientific name of the constituent plants
<b>Παπατίτο<sup>2</sup>:</b> (goat or lamb, pork, beef, oil)	<ul style="list-style-type: none"> <li>● πατάτες/potatoes</li> <li>● σκόρδο/garlic</li> <li>● κρεμμύδια/onions</li> <li>● ρίγανη/oregano</li> <li>● γαρύφαλλο/clove</li> <li>● δάφνη/laurel (bay leaf)</li> <li>● δενδρολίβανο/rosemary</li> <li>● κανέλα/(true) cinnamon</li>   <li>● μοσχοκάρυδο/nutmeg</li> <li>● μαυροπίπερο/black pepper</li> <li>● ντομάτες/tomatoes</li> </ul>	<ul style="list-style-type: none"> <li>● Solanum tuberosum L.</li> <li>● Allium sativum L.</li> <li>● Allium cepa L.</li> <li>● Origanum vulgare L. subsp. hirtum (Link)Jetsw.</li> <li>● Syzygium aromaticum (L.) Merrill &amp; Perry</li> <li>● Laurus nobilis L.</li> <li>● Rosmarinus officinalis L.</li> <li>● Cinnamomum verum J.Presl [Cinnamomum zeylanicum Blume]</li> <li>● Myristica fragrans Houtt.</li> <li>● Piper nigrum L.</li> <li>● Solanum lycopersicum L.</li> </ul>
<b>Αμοργιανή φάβα (Μαγείραμα)</b> (flour, salt, oil)	<ul style="list-style-type: none"> <li>● φάβα/fava (field pea)</li> <li>● κρεμμύδια/onions</li> <li>● μαιντανός/parsley</li> <li>● άνηθος/dill</li> <li>● ρίγανη/oregano</li> <li>● ρόκα/arugula (rocket)</li> </ul>	<ul style="list-style-type: none"> <li>● Pisum sativum L. (local variant)</li> <li>● Allium cepa L.</li> <li>● Petroselinum crispum (Mill.) Fuss</li> <li>● Anethum graveolens L.</li> <li>● Origanum vulgare L. subsp. hirtum (Link)Jetsw.</li> <li>● Eruca sativa Mill.</li> </ul>
<b>Φαβατοκεφτέδες</b> (oil, cheese, eggs, salt)	<ul style="list-style-type: none"> <li>● φάβα/fava</li> <li>● κρεμμύδια/onions</li> <li>● μαιντανός/parsley</li> <li>● δύοσμος/spearmint</li> <li>● σμιγδάλι/semolina</li> <li>● μαυροπίπερο/black pepper</li> <li>● μάραθος/fennel</li> <li>● λεμόνι/lemon</li> </ul>	<ul style="list-style-type: none"> <li>● Pisum sativum L. (local variant)</li> <li>● Allium cepa L.</li> <li>● Petroselinum crispum (Mill.) Fuss</li> <li>● Mentha spicata L.</li> <li>● Triticum durum Desf.</li> <li>● Piper nigrum L.</li> <li>● Foeniculum vulgare Mill.</li> <li>● Citrus limon (L.) Burm.f.</li> </ul>

<sup>1</sup> It should be noted that in each of the above-mentioned foods, there are variations in the recipes regarding the number of plant ingredients. Here is presented a typical form-recipe.

<sup>2</sup> Foods/ingredients to be further analyzed

Some traditional foods with medicinal plants (in greek)	Greek/english popular names of the constituent plants <sup>1</sup>	Scientific name of the constituent plants
Ντολμαδάκια με αμπελόφυλλα – γιαπράκια: (salt, oil)	<ul style="list-style-type: none"> <li>● αμπελόφυλλα/vine leaf</li> <li>● ρύζι/rice</li> <li>● σιτάρι/common wheat</li> <li>● κρεμμύδια/onions</li> <li>● μαϊντανός/parsley</li> <li>● άνηθος/dill</li> <li>● λεμόνι/lemon</li> <li>● δύσσομος/spearmint ή/οr μάραθος/fennel</li> <li>● μαυροπίπερο/black pepper</li> </ul>	<ul style="list-style-type: none"> <li>● Vitis vinifera L.</li> <li>● Oryza sativa L.</li> <li>● Triticum aestivum L.</li> <li>● Allium cepa L.</li> <li>● Petroselinum crispum (Mill.) Fuss</li> <li>● Anethum graveolens L.</li> <li>● Citrus limon (L.) Burm.f.</li> <li>● Mentha spicata L. or Foeniculum vulgare Mill.</li> <li>● Piper nigrum L.</li> </ul>
Αμαργιανό παστέλι <sup>2</sup> : (honey)	<ul style="list-style-type: none"> <li>● σουσάμι/sesame</li> </ul>	<ul style="list-style-type: none"> <li>● Sesamum indicum L.</li> </ul>
Ξεροτήγανα: (flour, water, salt, oil, sugar, honey)	<ul style="list-style-type: none"> <li>● κανέλα/(true) cinnamon</li> <li>● γαρύφαλλο/clove</li> <li>● λεμόνι/lemon</li> <li>● σουσάμι/sesame</li> </ul>	<ul style="list-style-type: none"> <li>● Cinnamomum verum J.Presl [Cinnamomum zeylamicum Blume]</li> <li>● Syzygium aromaticum (L.) Merrill &amp; Perry</li> <li>● Citrus limon (L.) Burm.f.</li> <li>● Sesamum indicum L.</li> </ul>
Κοφτός [salt, oil, cheese (curd)]	<ul style="list-style-type: none"> <li>● σιτάρι/common wheat/ durum wheat</li> <li>● κρεμμύδια/onions</li> <li>● κανέλα/(true) cinnamon</li> </ul>	<ul style="list-style-type: none"> <li>● Triticum aestivum L./ Triticum durum Desf.</li> <li>● Allium cepa L.</li> <li>● Cinnamomum verum J.Presl [Cinnamomum zeylamicum Blume]</li> </ul>

<sup>1</sup> It should be noted that in each of the above-mentioned foods, there are variations in the recipes regarding the number of plant ingredients. Here is presented a typical form-recipe.

<sup>2</sup> Foods/ingredients to be further analyzed

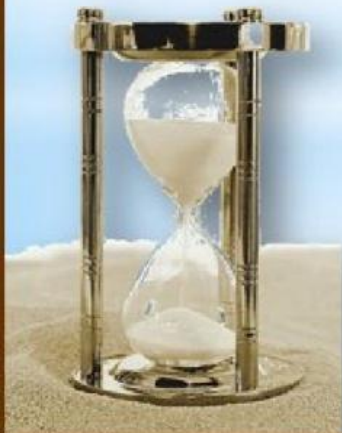


Some traditional foods with medicinal plants (in greek)	Greek/english popular names of the constituent plants <sup>1</sup>	Scientific name of the constituent plants
Αμπελοφάσουλα (salad) (salt)	<ul style="list-style-type: none"> <li>● αμπελοφάσουλα/cowpea</li> <li>● κρεμμύδια/onions</li> <li>● άνηθος/dill</li> <li>● λεμόνι/lemon</li> </ul>	<ul style="list-style-type: none"> <li>● Vigna unguiculata (L.) Walp.</li> <li>● Allium cepa L.</li> <li>● Anethum graveolens L.</li> <li>● Citrus limon (L.) Burm.f.</li> </ul>
Μελιτζάνα η αμοργιανή (oil)	<ul style="list-style-type: none"> <li>● μελιτζάνες/eggplants</li> <li>● κρεμμύδια/onions</li> <li>● ντομάτες/tomatoes</li> <li>● σκόρδο/garlic</li> <li>● δάφνη/laurel (bay leaf)</li> <li>● γαρούφαλλο/clove</li> <li>● μαυροπίπερο/black pepper</li> <li>● κανέλα/(true) cinnamon</li> </ul>	<ul style="list-style-type: none"> <li>● Solanum melongena L.</li> <li>● Allium cepa L.</li> <li>● Solanum lycopersicum L.</li> <li>● Allium sativum L.</li> <li>● Laurus nobilis L.</li> <li>● Syzygium aromaticum (L.) Merrill &amp; Perry</li> <li>● Piper nigrum L.</li> <li>● Cinnamomum verum J.Presl [Cinnamomum zeylamicum Blume]</li> </ul>
Πανάδα: (amorgian rusk, vinegar, oil)	<ul style="list-style-type: none"> <li>● κρεμμύδια/onions</li> <li>● μαυροπίπερο/black pepper</li> <li>● ρύζι/rice</li> </ul>	<ul style="list-style-type: none"> <li>● Allium cepa L.</li> <li>● Piper nigrum L.</li> <li>● Oryza sativa L.</li> </ul>
Ξιδάτο: [soup with goat and offal (the so-called 'patch as')]	<ul style="list-style-type: none"> <li>● σκόρδο/garlic</li> <li>● μαυροπίπερο/black pepper</li> </ul>	<ul style="list-style-type: none"> <li>● Allium sativum L.</li> <li>● Piper nigrum L.</li> </ul>

<sup>1</sup> It should be noted that in each of the above-mentioned foods, there are variations in the recipes regarding the number of plant ingredients. Here is presented a typical form and only the plant-derived materials are listed.

<sup>2</sup> Foods/ingredients to be further analyzed

**Due to limited time in this presentation we will focus only on three (3) traditional Amorgos foods and their main ingredients.**





## Potato



Potato cultivars appear in a variety of colors, shapes, and sizes.

### Scientific classification

Kingdom:	Plantae
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Asterids
Order:	Solanales
Family:	Solanaceae
Genus:	<i>Solanum</i>
Species:	<i>S. tuberosum</i>

### Binomial name

*Solanum tuberosum*

L



**Patatato (boiled potatoes with goat meat)** is a very common dish in Amorgos. It is widely cooked in panigiria (religious festivals) and can be easily found in many taverns around the island. Occasionally it can be prepared with lamb or veal.



**Πατατάτο:**

(goat or lamb, pork, beef, oil)

- πατάτες/potatoes
- σκόρδο/garlic
- κρεμμύδια/onions
- ρίγανη/oregano
- γαρύφαλλο/clave
- δάφνη/laurel (bay leaf)
- δενδρολίβανο/rosemary
- κανέλα/(true) cinnamon
  
- μοσχokάρυδο/nutmeg
- μαυροπίπερο/black pepper
- ντομάτες/tomatoes

- Solanum tuberosum L.
- Allium sativum L.
- Allium cepa L.
- Origanum vulgare L. subsp. hirtum (Link)letsw.
- Syzygium aromaticum (L.) Merrill & Perry
- Laurus nobilis L.
- Rosmarinus officinalis L.
- Cinnamomum verum J.Presl  
[Cinnamomum zeylamicum Blume]
- Myristica fragrans Houtt.
- Piper nigrum L.
- Solanum lycopersicum L.

**In red: Foods/ingredients to be further analyzed**





### People use potatoes as medicinal plant...

- Orally, raw potato juice is used for gastritis, stomach disorders, and edema.
- Topically, raw potato is used as a poultice for arthritis, infections, boils, burns, and sore eyes.
- A purified protein extract from potato is used as an appetite suppressant for weight loss.
- In foods, potato is eaten, used as a source of starch, and fermented into alcohol.

Potato peel has also been used successfully in developing countries as a replacement for more expensive conventional bandages in minor burns.

The various notable pharmacological actions of the plant are activity on heart, anti-diabetic and cholesterol trimming property, antimicrobial activity, antiulcer activity, anti-oxidative property, anti-diarrhea activity, phagocytic activity, cytotoxic activity etc.

#### References:

- [naturalmedicines.therapeuticresearch.com](http://naturalmedicines.therapeuticresearch.com)
- Keswani MH, Patil AR. The boiled potato peel as a burn wound dressing: a preliminary report . *Burns Incl Therm Inj* . 1985;11:220-224.
- Brown CR. Antioxidants in potato. *Amer. J. Potato Res.* 2005; 82: 163- 172.
- Das, Koushika & Krishna, Pranit & Sarkar, Avipsha & Sundari Ilangoan, Shanmuga & Sen, Shampa. A review on pharmacological properties of *Solanum tuberosum*. *Research Journal of Pharmacy and Technology* 2017; 10(5):1517





## Dosing & Administration

**ORAL:** For appetite suppression and weight loss, a purified protein extract from potato, containing a proteinase inhibitor, is marketed as a powder to be mixed with 8 ounces of water and taken 15 minutes before meals. There is no typical dosage of potato juice.

**TOPICAL:** Raw potato is used as a poultice.

### References:

- [naturalmedicines.therapeuticresearch.com](http://naturalmedicines.therapeuticresearch.com)
- *The Review of Natural Products by Facts and Comparisons*. St. Louis, MO: Wolters Kluwer Co., 1999.
- Satirol press releases. PacificHealth Labs, Inc., Woodbridge, NJ. [www.satirol.com/press.htm](http://www.satirol.com/press.htm) and [www.satirol.com/press1.htm](http://www.satirol.com/press1.htm) (Accessed 10 January 2000).

## Adverse Effects

Adverse reactions have not been reported with unblemished, ripe potatoes.

Solanum glycosides found in damaged, green potatoes and sprouts can cause **headache, flushing, nausea, vomiting, diarrhea, abdominal pain, thirst and restlessness.**

**Deaths** have been reported in malnourished individuals who may not have received adequate medical care.

### References:

- [naturalmedicines.therapeuticresearch.com](http://naturalmedicines.therapeuticresearch.com)
- Ellenhorn MJ, et al. *Ellenhorn's Medical Toxicology: Diagnoses and Treatment of Human Poisoning*. 2nd ed. Baltimore, MD: Williams & Wilkins, 1997.
- *The Review of Natural Products by Facts and Comparisons*. St. Louis, MO: Wolters Kluwer Co., 1999.







### Interactions with Drugs with **THROMBOLYTIC DRUGS**

Interaction rating= **Moderate (Be cautious with this combination)**

Theoretically, concomitant use of potato may enhance thrombolytic effects (bleeding, hemorrhage).

(A carboxypeptidase inhibitor isolated from potato tubers may have inhibitory effects on thrombin-activatable thrombolysis inhibitor, and thereby enhance the activity of thrombolytic agents.)

#### References:

- [naturalmedicines.therapeuticresearch.com](http://naturalmedicines.therapeuticresearch.com)
- Klement P, Liao P, Bajzar L. A novel approach to arterial thrombolysis. *Blood* 1999; 94:2735-43.
- Redlitz A, Nicolini FA, Malycky JL, et al. Inducible carboxypeptidase activity. A role in clot lysis in vivo. *Circulation* 1996; 93:1328-30.

ANGIOX
ATRYN
BRILIQUE
CEPROTIN
GREPID
HEMERAN
IVOR
IVORMAX
ORGARAN
RAPILYSIN
STREPTASE
THROMBOPARIN



### Interactions with Diseases

**DIABETES: Potatoes can affect blood sugar control.** They should be consumed as appropriate carbohydrate equivalents, because potatoes contain starch (amylum) which in our body is converted into glucose.

#### References:

- [naturalmedicines.therapeuticresearch.com](http://naturalmedicines.therapeuticresearch.com)
- *The Review of Natural Products by Facts and Comparisons*. St. Louis, MO: Wolters Kluwer Co., 1999.

## Plants used daily in Amorgian cuisine (culinary herbs) - clinical approach

Greek popular name of the plant	English/scientific names of the plant	Effectiveness-Clinical indications	Major interactions with Drugs <i>(Do not take this combination!)</i>	Significant adverse effects of the plant
<p>Σκόρδο</p>   <p style="border: 1px solid red; padding: 2px; font-size: small;">GARLIC AGAINST... EVIL EYE! (popular superstitions)</p>	<ul style="list-style-type: none"> <li>●Garlic</li> <li>●Allium sativum L.</li> </ul> <p>[●Garlic is a culinary herb cultivated worldwide.</p> <p>●Garlic has been used for commercial, culinary, mythical, and medicinal purposes.</p> <p>●there are many other therapeutic uses of the plant (mainly in the folk medicine), but at the moment without a good scientific clinical evidence]</p>	<ul style="list-style-type: none"> <li>●atherosclerosis</li> <li>●diabetes</li> <li>●hyperlipidemia.</li> <li>●reduction of blood pressure</li> <li>●prostate cancer</li> </ul>	<ul style="list-style-type: none"> <li>●ISONIAZID (INH, Nydrazid)</li> <li>●ANTIDIABETES DRUGS</li> <li>●ANTIHYPERTENSIVE DRUGS</li> <li>●ANTICOAGULANT/ ANTIPLATELET DRUGS</li> </ul> <p>risk of bruising and bleeding:</p> <ul style="list-style-type: none"> <li>-aspirin</li> <li>-clopidogrel (Plavix)</li> <li>-nonsteroidal anti-inflammatory drugs [diclofenac (Voltaren) ibuprofen (Advil, Motrin, etc), naproxen (Naprosyn), dalteparin (Fragmin); enoxaparin (Lovenox); heparin; warfarin (Coumadin), etc.]</li> </ul>	<ul style="list-style-type: none"> <li>●malodorous breath-body odor</li> <li>●nausea-vomiting</li> <li>●flatulence</li> <li>●abdominal pain or fullness</li> <li>●anorexia-weight loss</li> <li>●diarrhea-constipation</li> <li>●belching</li> <li>●taste sensations</li> <li>●heartburn</li> <li>●unpleasant taste</li> <li>●reflux</li> <li>●bowel obstruction</li> <li>●facial flushing</li> <li>●tachycardia</li> <li>●dizziness</li> <li>●insomnia</li> <li>●allergic reactions</li> <li>●risk of bleeding</li> <li>●Topically, fresh garlic may cause contact dermatitis and urticaria and burns (2<sup>d</sup> and 3<sup>rd</sup> degree burns) in children and infants</li> <li>●Topically, garlic may also cause hyperpigmentation, ulcers, necrotic lesions, facial flushing, and local irritation</li> </ul>





Greek popular name of the plant	English/scientific names of the plant	Effectiveness-Clinical indications	Moderate interactions with Drugs (Use cautiously or avoid combination!)	Significant adverse effects of the plant
<p data-bbox="315 320 421 347">Κρεμμύδι</p> 	<ul style="list-style-type: none"> <li>●Onion</li> <li>●<i>Allium cepa</i> L.</li> </ul> <p data-bbox="613 488 869 611">[●Onion is cultivated worldwide and commonly used as a food.</p> <ul style="list-style-type: none"> <li>●It is also sometimes used for medicinal applications</li> <li>●In folk medicine, onions were cooked in milk and used as a mucolytic to clear congested airways</li> <li>●there are many other therapeutic uses of the plant (mainly in the folk medicine), but at the moment without a good scientific clinical evidence]</li> </ul>	<ul style="list-style-type: none"> <li>●scarring (wound-healing effect): topical application of onion extract, improves the appearance as well as pain and itching associated with postburn hypertrophic scars, keloidal scars, scars following tattoo removal, or scars following surgical removal of tissue .</li> <li>●diabetes-antidiabetic effects</li> <li>●hypertension-antihypertensive effects</li> <li>●bronchial asthma</li> <li>●antibacterial and antifungal effects</li> <li>●hypolipidemic effects (cholesterol)</li> </ul>	<ul style="list-style-type: none"> <li>●<b>ANTIDIABETES DRUGS:</b> In animals and humans with diabetes, as well as in healthy humans, consuming onions or onion extract can decrease levels of blood glucose.</li> <li>●<b>ASPIRIN:</b> Concomitant intake might augment onion allergy, as well as severe urticaria and swelling.</li> <li>●<b>ANTICOAGULANT/ ANTIPLATELET HERBS AND SUPPLEMENTS:</b> risk of bleeding (angelica, clove, garlic, ginger, ginkgo, Panax ginseng, red clover, turmeric, etc.)</li> <li>●<b>HERBS AND SUPPLEMENTS WITH HYPOGLYCEMIC POTENTIAL:</b> fenugreek, guar gum, Panax ginseng, Siberian ginseng</li> </ul>	<ul style="list-style-type: none"> <li>●Topically, frequent contact with onions can result in hand eczema, pemphigus, sensitization, and irritation</li> <li>●Exposure to onion aroma (derivatives of cysteine sulfoxide) can cause excessive tearing</li> <li>●Stomach distress or heartburn may occur with ingestion of large quantities of onion</li> </ul>  





*Origanum vulgare* L. subsp. *hirtum* (Link) letsw.



*Origanum onites* L.

DEMETZOS C., PERDETZOGLIUD.K.& TANK. (2001). Composition and antimicrobial studies of the oils of *Origanum calcaratum* Juss. and *O. scabrum* Boiss. et Heldr. from Greece. Journal of Essential Oil Research 13:460-462.




*Origanum calcaratum* Juss.

## Origanum taxa on Amorgos


Greek popular name of the plant	English/scientific names of the plant	Effectiveness-Clinical indications	Moderate interactions with Drugs  (Do not take this combination!)	Significant adverse effects of the plant
Ρίγανη	<ul style="list-style-type: none"> <li>●Oregano</li> <li>●Origanum vulgare L.</li>   <li>●Oregano leaves are used dry or fresh as a culinary herb to flavor baked goods, vegetables, pizza and pasta sauces, fish, and meat.</li> </ul>	<ul style="list-style-type: none"> <li>●Antibacterial, antidiabetic, antiviral, antifungal effects.</li>   <li>●Wound healing: wounds from minor dermatological surgery.</li> </ul>	<ul style="list-style-type: none"> <li>●<b>ANTICOAGULANT/ ANTIPLATELET DRUGS:</b> risk of bruising and bleeding: <ul style="list-style-type: none"> <li>-aspirin</li> <li>-clopidogrel (Plavix)</li> <li>-nonsteroidal anti-inflammatory drugs [diclofenac (Voltaren) ibuprofen (Advil, Motrin, etc), naproxen (Naprosyn), dalteparin (Fragmin); enoxaparin (Lovenox); heparin; warfarin (Coumadin), etc.]</li> </ul> </li> <li>●<b>ANTIDIABETES DRUGS</b></li> <li>●<b>ANTICOAGULANT/ ANTIPLATELET HERBS AND SUPPLEMENTS:</b> risk of bleeding (angelica, clove, garlic, ginger, ginkgo, Panax ginseng, red clover, turmeric, etc.)</li> <li>●<b>IRON absorption</b></li> <li>●<b>ZINC absorption</b></li> </ul>	<ul style="list-style-type: none"> <li>●allergic contact dermatitis</li> <li>●systemic allergic reactions</li> <li>●orally, large amounts of oregano can cause gastrointestinal upset.</li> <li>●<b>CROSS-ALLERGENICITY:</b> Oregano can cause reactions in people allergic to other plants in the Lamiaceae family, including thyme, basil, hyssop, lavender, marjoram, mint, and sage.</li> <li>●theoretically, oregano might lower blood glucose.</li> <li>●oregano used in medicinal amounts, might increase the risk of bleeding in patients with bleeding disorders.</li> <li>●patients have to discontinue oregano at least 2 weeks before elective surgical procedures. e levels.</li> </ul>



Greek popular name of the plant	English/scientific names of the plant	Effectiveness-Clinical indications	Major interactions with diseases	Significant adverse effects of the plant
<p>Γαρίφαλο, μασχακάρφι, καρδιάφυλλο</p> 	<ul style="list-style-type: none"> <li>●Clove</li> <li>●<i>Syzygium aromaticum</i> (L.) Merrill &amp; Perry (=Eugenia caryophyllata Thunb.)</li> </ul> <p>[●The applicable parts of clove are the oils, flowers, leaves, and stems.</p> <ul style="list-style-type: none"> <li>●Popular use of clove flower buds in tobacco products and as a culinary spice.</li> <li>●in foods and beverages, clove is used as a flavoring, is used in toothpaste, soaps, cosmetics, and perfumes.</li> <li>●there are many other therapeutic uses of the plant (mainly in the folk medicine), but at the moment without a good scientific clinical evidence]</li> </ul>	<ul style="list-style-type: none"> <li>●Premature ejaculation: clove flower + Panax ginseng root, Angelica root, Cistanches deserticola, Zanthoxyl species, Torlidis seed, Asiasari root, etc.</li> <li>●Dental plaque</li> <li>●Mosquito repellent: Clove oil</li> <li>●Antibacterial effects (oil of clove or eugenol) according to Laboratory research studies.</li> <li>●Eugenol: anti-inflammatory, antifungal, antiparasitic, antioxidant, and anesthetic (especially post oral surgery) effects</li> </ul> <p style="text-align: center;">etc.</p>	<ul style="list-style-type: none"> <li>●<b>BLEEDING DISORDERS:</b> Clove oil has antiplatelet effects. Theoretically, taking clove oil might exacerbate bleeding in patients with bleeding disorders.</li> <li>●<b>SURGERY:</b> Clove oil has antiplatelet effects. Clove oil might cause excessive bleeding if used perioperatively. Patients have to discontinue clove oil at least 2 weeks before elective surgical procedures.</li> </ul>	<ul style="list-style-type: none"> <li>●Dental decay, gingival damage, mucous membrane irritation, and ulcers have been reported in some cases with topical clove use.</li> <li>●Sporadic erectile dysfunction and excessively delayed ejaculation have been reported.</li> <li>●Orally, hypoglycemia, metabolic acidosis, central nervous system (CNS) alterations including seizure, disseminated intravascular coagulation, liver failure and electrolyte imbalances have been reported in children after ingestion of clove oil.</li> <li>●More than half of the world's clove production is used in clove cigarettes. Smoking clove cigarettes increases heart rate, systolic blood pressure, plasma levels of nicotine, and exhaled carbon monoxide. Clove cigarettes also contain significant amounts of nicotine, tar, and carbon monoxide that might cause long-term health effects similar to tobacco smoking.</li> </ul> <p style="text-align: center;">etc.</p>

Greek popular name of the plant	English/scientific names of the plant	Effectiveness-Clinical indications	Moderate interactions with Drugs  <i>(Do not take this combination!)</i>	Significant adverse effects of the plant
<p>Δάφνη</p> 	<ul style="list-style-type: none"> <li>● Bay Leaf (laurel)</li> <li>● Laurus nobilis L.</li> </ul> <p>[● Bay has been used since ancient Greece and came to symbolize wisdom to the Greeks and Romans, who crowned kings, poets, and athletes.</p> <ul style="list-style-type: none"> <li>● it is used for medicinal and economic purposes</li> <li>● today, it is primarily used to flavor foods</li> <li>● there are many other therapeutic uses of the plant (mainly in the folk medicine), but at the moment without a good scientific clinical evidence]</li> </ul>	<ul style="list-style-type: none"> <li>● Antioxidant effects</li> <li>● Antibacterial effects: In laboratory studies</li> <li>● Antidiabetic effects</li> <li>● Antifungal and antiviral effects: In laboratory studies (essential oil)</li> <li>● Diabetes</li> <li>● Hyperli</li> </ul>	<ul style="list-style-type: none"> <li>● <b>ANTIDIABETES DRUGS:</b> bay leaf can lower blood glucose levels</li> <li>● <b>CNS DEPRESSANTS:</b> bay leaf can enhance the therapeutic and adverse effects of sedatives</li> <li>● <b>NARCOTIC DRUGS:</b> bay leaf can enhance the therapeutic and adverse effects of narcotics</li> <li>● <b>HERBS AND SUPPLEMENTS WITH HYPOGLYCEMIC POTENTIAL:</b> alpha-lipoic acid, bitter melon, chromium, devil's claw, fenugreek, garlic, Panax ginseng, prickly pear cactus, psyllium, Siberian ginseng, etc.</li> <li>● <b>INTERACTIONS WITH LAB TESTS</b> <b>BLOOD GLUCOSE:</b> Bay leaf might reduce blood glucose concentrations and test results in patients with type 2 diabetes</li> </ul>	<ul style="list-style-type: none"> <li>● the whole leaf is indigestible and can become lodged in the esophagus or hypopharynx, or can perforate the intestinal lining</li> <li>● bay leaf might cause additive CNS depression when combined with anesthesia and other medications during and after surgical procedures</li> <li>● contact dermatitis and hand and face eczema, including airborne contact dermatitis</li> <li>● perioral dermatitis with eczematous stomatitis</li> <li>● in case reports, bay leaves have become lodged in various places in the gastrointestinal tract, including the duodenum, hypopharynx, small intestine, and the esophagus</li> </ul>



Greek popular name of the plant	English/scientific names of the plant	Effectiveness-Clinical indications	Moderate interactions with Drugs (Use cautiously or avoid combination!)	Significant adverse effects of the plant
<p data-bbox="280 448 459 475">Δενδρολίβανο</p> 	<ul style="list-style-type: none"> <li>●Rosemary</li> <li>●Rosmarinus officinalis L.</li> </ul> <p data-bbox="571 651 889 1018">[●In foods, rosemary is used as a spice ●The leaf and oil are used in foods, and the oil in beverages ●there are many other therapeutic uses of the plant (mainly in the folk medicine), but at the moment without a good scientific clinical evidence]</p>	<ul style="list-style-type: none"> <li>●rheumatoid arthritis or osteoarthritis: formulations containing rosemary leaf extract + oleonic acid from olive leaf, and iso-alpha acids from hops</li> </ul>	<ul style="list-style-type: none"> <li>●<b>ANTICOAGULANT/ ANTIPLATELET DRUGS:</b> risk of bruising and bleeding: -aspirin -clopidogrel (Plavix) -nonsteroidal anti-inflammatory drugs [diclofenac (Voltaren) ibuprofen (Advil, Motrin, etc), naproxen (Naprosyn), dalteparin (Fragmin); enoxaparin (Lovenox); heparin; warfarin (Coumadin), etc.]</li> <li>●<b>IRON:</b> rosemary might reduce the absorption of iron supplements, iron from foods by 15-20%</li> <li>●<b>SALICYLATE-CONTAINING HERBS</b> (poplar, willow bark, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>●Orally, large amounts of leaves containing rosemary oil might cause: -deep coma -spasm -vomiting -gastroenteritis -uterine bleeding -kidney irritation -pulmonary edema -asthma</li> <li>●<b>Topically:</b> -photosensitivity, -erythema -dermatitis, and cheilitis in hypersensitive individuals</li> </ul>



Pea

Peas are contained within a pod



Pea plant: *Pisum sativum*

**Scientific classification**

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: Fabales
- Family: Fabaceae
- Genus: *Pisum*
- Species: *P. sativum*

**Binomial name**

*Pisum sativum*  
L.



'**Fava of Amorgos**' or '**mageirema**' as it is said by the locals, is one of the most delicious and famous dishes on the island and it is prepared from the dried peeled and split seeds obtained from a local variety of the legume ***Pisum sativum* L.** (field pea)





# Fava Amargosa

Origin:	South and Central America
Prominent tradenames:	Fava Amargosa Angeim Amargoso Faveira Amarela
Commercial restrictions:	No commercial restriction

## SPECIES RESUMÉ:

The wood is bright yellow when freshly sawn, becoming yellow brown to dark brown or red brown. It has clearly demarcated sapwood. The grain is straight or interlocked and the texture is coarse. Density at 12 % moisture content: 0.75 g/cm<sup>3</sup>.

The blunting effect is fairly high; peeling is not recommended and slicing is reported to be good. Sawdust may cause allergies. Nailing is good but pre-boring is necessary. Gluing is correct. Fava Amargosa dries rapid to normal. Fava Amargosa is moderately durable to fungi and is durable to dry wood borers; sapwood demarcated (risk limited to sapwood).

Fava Amargosa can be used for several applications:

- **Interior:** e.g. high class furniture, stairs, panelling, flooring, sliced veneer, industrial or heavy flooring, joinery, formwork
- **Exterior:** e.g. exterior joinery, heavy carpentry. It is recommended to prepare surfaces and apply an undercoat, such as filling, before finishing as Fava Amargosa contains anti-siccatives.

References: CIRAD Forestry Department

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References: CIRAD Forestry Department



This is a type of wood named "Fava Amargosa"!

**Αμοργιανή φάβα (Μαγείραμα)**  
(flour, salt, oil)

- φάβα/fava (field pea)
- κρεμμύδια/onions
- μαϊντανός/parsley
- άνηθος/dill
- ρίγανη/oregano
- ρόκα/arugula (rocket)

- Pisum sativum L. (local variant)
- Allium cepa L.
- Petroselinum crispum (Mill.) Fuss
- Anethum graveolens L.
- Origanum vulgare L. subsp. hirtum (Link)letsw.
- Eruca sativa Mill.





**Field pea (*Pisum sativum* L.)** is an important legume with extensive use in animal feeds and has been tested as alternative to fishmeal. It is known that its seeds possess contraceptive, fungistatic, antibacterial, spermicidal properties, as well as mild antioxidant and thrombolytic activity. The dried and powdered seed has been used as a poultice on the skin, where it has an appreciable effect on many types of skin disorders including acne. The seed oil reduces the pregnancy rate in women and the sperm count in male.

Bioactive peptides of seed proteins from ***Pisum sativum* L. (Fabaceae)** could be applied as functional ingredients for protecting infants and children against infections such as *Helicobacter pylori*.


References:

- *Pisum sativum* ('Fava of Amorgos'): A considerable source of bioactive natural compounds. Aliigiannis Nektarios. [http://www.iama.gr/ethno/fava\\_amorgos/fava\\_nektariosaligiannis.pdf](http://www.iama.gr/ethno/fava_amorgos/fava_nektariosaligiannis.pdf) (Amorgos, 27-28.6.2009)
- Md Nazmul Hasan Zilani, Tamanna Sultana, S. M. Asabur Rahman, Md Anisuzzman, Md Amirul Islam, Jamil A. Shilpi, and Md Golam Hossain. Chemical composition and pharmacological activities of *Pisum sativum*. *BMC Complement Altern Med*. 2017; 17: 171.
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Greek popular name of the plant	English/scientific names of the plant	Effectiveness-Clinical indications	Moderate interactions with Drugs  <i>(Do not take this combination!)</i>	Significant adverse effects of the plant
<p>Σουσάμι honey local sweet wine (This step is necessary to prevent pasteli from sticking to marble or wood.) sugar (optionally)</p> <p>[Pasteli is the traditional sweet of Amorgos. It's served at weddings, baptisms and social events. It consists of sesame and honey placed on a lemon leaf.]</p> 	<ul style="list-style-type: none"> <li>●Sesame</li> <li>●<b>Sesamum indicum L.</b></li> </ul>	<ul style="list-style-type: none"> <li>●<b>Antibacterial effects:</b> In vitro, sesame oil and/or sesame had antibacterial effects against <i>Staphylococcus aureus</i> and <i>Streptococcus pneumoniae</i>.</li> <li>●<b>Antidiabetic effects:</b> In hypertensive diabetic patients, sesame oil supplementation in place of other cooking oils decreases plasma glucose. In patients with type 2 diabetes, consumption of halvah, a sesame candy, decreases postprandial blood glucose levels.</li> <li>●Antifungal, antioxidant, antihypertensive, cardiovascular and antineoplastic effects.</li> </ul>	<ul style="list-style-type: none"> <li>●<b>ANTIDIABETES DRUGS:</b> Evidence from human and animal research suggests that sesame oil decreases plasma glucose. Theoretically, sesame might have additive effects with antidiabetes drugs and increase the risk of hypoglycemia.</li> <li>●<b>ANTIHYPERTENSIVE DRUGS:</b> Sesame has shown hypotensive effects in clinical research. Theoretically, sesame may increase the risk of hypotension when used in combination with antihypertensive drugs.</li> <li>●<b>HERBS AND SUPPLEMENTS WITH HYPOTENSIVE EFFECTS:</b> casein peptides, coenzyme Q-10, fish oil, L-arginine, lycium, stinging nettle, theanine, etc.</li> <li>●<b>TAMOXIFEN (Nolvadex):</b> large doses of sesame might interfere with tamoxifen.</li> <li>●<b>HERBS AND SUPPLEMENTS WITH HYPOGLYCEMIC POTENTIAL:</b> fenugreek, guar gum, Panax ginseng, Siberian ginseng, etc.</li> </ul>	<ul style="list-style-type: none"> <li>●Multiple cases of allergic response to <b>sesame seed</b> occurring after occupational, topical, intramuscular, or oral exposure have been reported. <b>Allergic symptoms</b> may be dermatologic [such as angioedema, cheilitis, dermatitis edema, erythema, pruritis, purpura, and urticaria], musculoskeletal, respiratory [such as asthma, rhinitis, and wheezing] gastrointestinal [such as vomiting] and others such as conjunctivitis, anaphylactic shock and hemodynamic modifications.</li> <li>●In clinical trials involving a sesame oil nasal spray, minor adverse effects included adverse smell, oil dripping from the nose, and nasal blockage.</li> <li>●There are clinical data supporting a causal association of tahini, a sesame seed-containing food, with <b>thrombocytopenia</b>.</li> <li>●Theoretically, sesame might interfere with blood glucose control during and after surgical procedures. Patients have to discontinue using medicinal amounts of sesame at least 2 weeks before elective surgical procedures.</li> </ul>

Famous plant used daily in Amorgos in form of oil and ointment  
 (This is not a part of food, but it can interact with other amorgian kitchen plants  
 as well as with medicines taken by local people)

Greek popular name of the plant	English/scientific names of the plant	Effectiveness- Clinical indications	Mayor interactions with Drugs <i>(Do not take this combination!)</i>	Significant adverse effects of the plant
<ul style="list-style-type: none"> <li>● Βαλασμόχορτο</li> <li>● Σπαθόχορτο</li> <li>● Υπερικό</li> </ul> 	<ul style="list-style-type: none"> <li>● St. John's wort</li> <li>● <i>Hypericum perforatum</i> L.</li> </ul> <p>● there are many other therapeutic uses of the plant (mainly in the folk medicine), but at the moment without a strong scientific clinical evidence]</p>	<ul style="list-style-type: none"> <li>● depression</li> <li>● anxiety</li> <li>● reduction of menopausal symptoms</li> <li>● premenstrual syndrome (PMS)</li> <li>● wound healing (Topical)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>ALPRAZOLAM</b> (Xanax)</li> <li>● <b>OMEPRAZOLE</b> (Prilosec, Zegerid)</li> <li>● <b>WARFARIN</b> (Coumadin)</li> <li>● <b>CONTRACEPTIVE DRUGS</b></li> <li>● <b>DIGOXIN</b> (Lanoxin)</li> <li>● <b>DOCETAXEL</b> (Docefrez, Taxotere)</li> <li>● <b>FENFLURAMINE</b> (Pondimin)</li> <li>● <b>IMATINIB</b> (Gleevec)</li> <li>● <b>IRINOTECAN</b> (Camptosar)</li> <li>● <b>KETAMINE</b> (Ketalar)</li> <li>● <b>MEPHENYTOIN</b> (Mesantoin)</li> <li>● <b>PHENOBARBITAL</b> (Luminal)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Both topical use and chronic oral use can cause significant photodermatitis</b></li> <li>● insomnia</li> <li>● vivid dreams</li> <li>● restlessness</li> <li>● anxiety</li> <li>● agitation</li> <li>● irritability</li> <li>● gastrointestinal discomfort</li> <li>● diarrhea</li> <li>● fatigue</li> <li>● dry mouth</li> <li>● dizziness</li> <li>● headache</li> <li>● skin rash</li> <li>● paresthesia</li> <li>● hypoglycemia</li> </ul>





**According to Hippocrates:**

*"Make your medicine your food and your food become your medicine."*

**Hippocrates said in his work "On Diet" (paragraph 19):**

*"Food can be a good medicine, but food can also be a poor medicine, food is handy or excellent depending on the circumstances."*





**The most important of all!**  
**No medicinal plant is beneficial**  
**and no food is delicious**  
**if we are always pressed, nervous and agitated...**

**STRESS**







**Inner peace, calmness and harmony give us  
consolation and help us  
to enjoy... our food and our lives!**

Thank  
you!

