

# Goniothalamus

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Goniothalamus is a genus of plant in family Annonaceae. It contains the following species : \* Goniothalamus calycinus, James Sincl.\* Goniothalamus cheliensis, Hu\* Goniothalamus chinensis, Merr. & Chun\*

Goniothalamus curtisii, King\* Goniothalamus gardneri, Hook.f. & Thomson\* Goniothalamus holttumii, J. Sincl.\* Goniothalamus hookeri, Thwaites\* Goniothalamus macrocalyx, Ban\* Goniothalamus majestatis, KeÃfÅ,ler\* Goniothalamus montanus, James Sincl.\* Goniothalamus rhynchantherus, Dunn\* Goniothalamus salicina, Hook.f. & Thomson\* Goniothalamus simonsii, Hook.f. & Thomson\* Goniothalamus tenuifolius, King\* Goniothalamus wynaadensis, Beddome

Category:Annonaceae Halogenation 648748 167116397 2007-10-26T01:04:37Z SieBot 4005189 robot Adding: nl:Halogeneren Halogenation is a chemical reaction that incorporates a halogen atom into a molecule. More specific descriptions exist that specify the type of halogen: fluorination, chlorination, bromination, and iodination. In a Markovnikov addition reaction, a halogen like bromine is reacted with an alkene which causes the  $\pi$ -bond to break forming an haloalkane. This makes the hydrocarbon more reactive and bromine as it turns out, is a good leaving group in further chemical reactions such as nucleophilic aliphatic substitution reactions and elimination reactions. Several main types of halogenation exist, including: \* Free radical halogenation \* Ketone halogenation \* Electrophilic halogenation \* Halogen addition reaction. Specific halogenation methods are the Hunsdiecker reaction and the Sandmeyer reaction. An example of halogenation can be found in the organic synthesis of the anesthetic halothane from trichloroethylene which involves a high temperature bromination in the second step : ([From the Wikipedia article Goniothalamus](#).)

## Recent Publications on Goniothalamus:



- [Bioactive styryllactones and alkaloid from flowers of Goniothalamus laoticus.](#)  
*ETHNOPHARMACOLOGICAL RELEVANCE: Goniothalamus laoticus (Annonaceae) is...*3rd November, 2009  
Natural Products Research Unit, Department of Chemistry and Center of- J Ethnopharmacol. 2009 Aug 17;125(1):47-50. Epub 2009 Jun 30. ([DOI Direct Link](#))
- [Antiplasmodial properties of some Malaysian medicinal plants.](#)  
*Seven Malaysian medicinal plants were screened for their antiplasmodial...*12th September, 2009  
Herbal Medicine Research Center, Institute for Medical Research, Jalan- Trop Biomed. 2007 Jun;24(1):29-35.
- [Asymmetric total synthesis and antiproliferative activity of goniothalamine oxide isomers.](#)  
*Goniothalamine oxide (1) is a styryl lactone which was isolated from bark...*30th May, 2009  
Departamento de Quimica Organica, Instituto de Quimica, Universidade- Bioorg Chem. 2009 Apr;37(2):52-6. Epub 2009 Jan 29. ([DOI Direct Link](#))
- [Cytotoxicity of goniothalamine enantiomers in renal cancer cells: involvement of nitric oxide, apoptosis and autophagy.](#)

- Goniothalamina* is a styryllactone synthesized by plants of the genus...22nd January, 2009  
Departamento de Bioquímica, Instituto de Biología, Universidade Estadual- Chem Biol Interact. 2008  
Nov 25;176(2-3):143-50. Epub 2008 Aug 14. ([DOI Direct Link](#))
- [Vibrational spectroscopic studies and ab initio calculations of Goniothalamina, a natural product.](#)  
*5,6-Dihydro-6-styryl-2-pyrone (Goniothalamina), is isolated from the leaves...*10th January, 2009  
Department of Chemistry, TKM College of Arts and Science, Kollam, Kerala,- Spectrochim Acta A Mol  
Biomol Spectrosc. 2008 Nov 15;71(2):731-8. Epub ([DOI Direct Link](#))
  - [The toxicity and physiological effect of goniothalamina, a styryl-pyrone, on the generalist herbivore, Spodoptera exigua Hubner.](#)  
*Efficacy of Goniothalamina a styryl-pyrone isolated from Goniothalamus...*4th October, 2008  
Plant Environment Division, Honam Agricultural Research Institute,- Chemosphere. 2008  
Jul;72(9):1393-400. Epub 2008 May 21. ([DOI Direct Link](#))
  - [Asymmetric synthesis of \(+\)-altholactone: a styryllactone isolated from various Goniothalamus species.](#)  
*The asymmetric total synthesis of (+)-altholactone (1), a member of the...*17th June, 2008  
Institute of Organic Chemistry, RWTH Aachen, Landoltweg 1, 52074 Aachen,- Chemistry.  
2008;14(9):2842-9. ([DOI Direct Link](#))
  - [Goniothalamus species: a source of drugs for the treatment of cancers and bacterial infections?](#)  
*Irrespective of the presence of cytotoxic acetogenins and styryl-lactones...*30th October, 2007  
School of Pharmacy, The University of Nottingham (Malaysia Campus), Jalan- Evid Based  
Complement Alternat Med. 2007 Sep;4(3):299-311. ([DOI Direct Link](#))
  - [Styryl lactones and their derivatives: biological activities, mechanisms of action and potential leads for drug design.](#)  
*Nature is an inexhaustible source of natural compounds with interesting...*18th April, 2007  
Departamento de Química Orgânica, Instituto de Química, UNICAMP, C.P.- Curr Med Chem.  
2006;13(28):3371-84.
  - [New constituents from stems of Goniothalamus amuyon.](#)  
*Two new compounds, goniothalesacetate (1) and goniothalesdiol A (2)...*30th September, 2006  
Graduate Institute of Natural Products, Kaohsiung Medical University;- Chem Pharm Bull (Tokyo). 2006  
Jul;54(7):1040-3.
  - [Flavones with free radical scavenging activity from Goniothalamus tenuifolius.](#)  
*From the leaves of Goniothalamus tenuifolius, a new natural product namely...*18th July, 2006  
Department of Pharmacognosy, Faculty of Pharmaceutical Sciences,- Arch Pharm Res. 2006  
Mar;29(3):199-202.
  - [Screening of Thai medicinal plant extracts and their active constituents for in vitro antimalarial activity.](#)  
*To discover antimalarial substances from plants cultivated in Thailand...*16th June, 2006  
The Kitasato Institute for Life Sciences, Kitasato University, Tokyo,- Phytother Res. 2006  
Apr;20(4):307-9. ([DOI Direct Link](#))
  - [The cytotoxicity of naturally occurring styryl lactones.](#)  
*We extracted and isolated three natural styryl lactones from Goniothalamus...*20th April, 2006  
Institute of Medicinal Plant, Chinese Academy of Medical Science, Peking- Phytomedicine. 2006  
Feb;13(3):181-6. Epub 2005 Aug 15. ([DOI Direct Link](#))

## Goniothalamus Patents:



- 7524888- [Biorational repellents obtained from terpenoids for use against arthropods](#)
- 5536848- [Bioactive acetogenins and derivatives](#)
- 5587491- [Method for the synthesis of bis-tetrahydrofuranyl Annonaceous acetogenins](#)
- 5677467- [Synthesis of acetogenins](#)
- 5717113- [Bioactive acetogenins and derivatives](#)
- 5739358- [Synthesis of acetogenins](#)
- 5849936- [Method for the synthesis of bis-tetrahydrofuranyl annonaceous acetogenins](#)
- 5914410- [Intermediates for annonaceous acetogenins](#)
- 5955497- [Bioactive acetogenins](#)
- 6150540- [Versatile intermediate for annonaceous acetogenins](#)
- 6630589- [Identification of compounds for the treatment or prevention of proliferative diseases](#)
- 6991818- [Compound iso-squamocin obtained from seeds of annona squamosa and composition containing the same](#)
- 7057044- [Aporphine and oxoaporphine compounds and pharmaceutical use thereof](#)
- 7223874- [Bicyclic tetrahydrofuran lactone derivatives and process for the preparation thereof](#)
- 7294715- [Aporphine and oxoaporphine compounds and pharmaceutical use thereof](#)
- 5229419- [Chemotherapeutically active acetogenins](#)

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