

0017 - Chaste Tree by HPLC

Botanical Name: *Vitex agnus-castus*

Common Names: Chaste Tree, Vitex, Chasteberry, Abraham's Balm, Monk's Pepper

Plant Description:

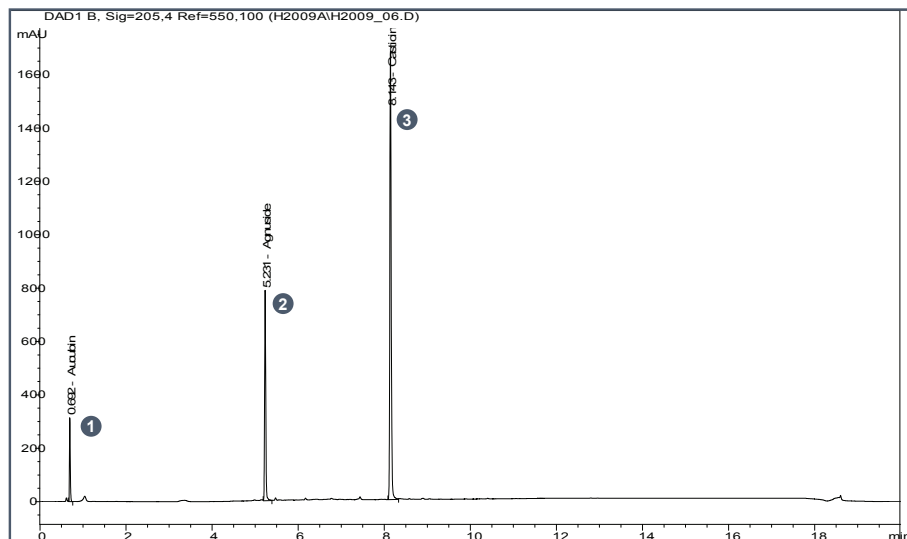
Native to the Mediterranean region, *Vitex agnus-castus* is one of the few temperate-zone species of *Vitex*. Recently the species has found popularity as a display plant in North American gardens. The tree is a sprawling plant that can grow 3-6m tall with a similar width. Its leaves are typically grey-green to dark green and have a light underside. Flowers bloom in clusters in late spring and early summer, producing a hazy purple cloud-like look. Each flower is followed by a fleshy fruit that contains four seeds. The leaves, stems and flowers are all harvested for medicinal purposes.



Therapeutic Use Overview:

Flavonoid, alkaloids, diterpenoids, Vitexin, Casticin and steroidal hormone precursors have been isolated from *Vitex agnus-castus*. Although not completely understood, the compounds present in the plant are believed to have dopaminergic effects resulting in changes of prolactin secretion. The tree is so named due to the belief that the extracts possess anaphrodisiac properties, attributed to decrease in sex drive experienced in male consumers. The herbs and berries have been used to treat female infertility, as well as stimulation of breast milk production.

Representative HPLC Analysis: Mixed Standard Solution



Analytes:

① Aucubin, ② Agnuside, ③ Casticin

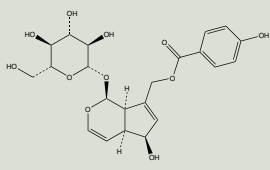
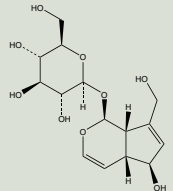
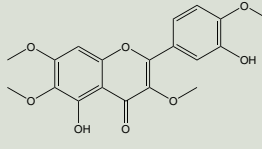
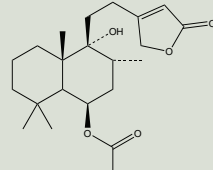
Instrument Parameters

Column: Phenomenex Luna C18(2) -HST, 100 x 2.0 mm, 2.5 μm
Detection: UV-Vis @ 205 nm
Flow Rate: 0.5 mL/min
Injection Volume: 3 μL
Temperature: 50° C
Mobile Phase A: ACN
Mobile Phase B: 0.1% H₃PO₄

Gradient Program

Time (min)	%A	%B
0	5	95
1	5	95
8	80	20
10	95	5
15	95	5
16	5	95
20	5	95

Phytochemical Reference Standards

Product Description And Details	Product ID	Qty
 <p>AGNUSIDE Grade: P CAS#: [11027-63-7] Chemical Formula: $C_{22}H_{26}O_{11}$ FW: 466.44</p>	<p>ASB-00011150-005 ASB-00011150-010 ASB-00011150-025</p>	<p>5mg 10mg 25mg</p>
 <p>AUCUBIN Grade: P CAS#: [479-98-1] Chemical Formula: $C_{15}H_{22}O_9$ FW: 346.34</p>	<p>ASB-00011085-005 ASB-00011085-010 ASB-00011085-025</p>	<p>5mg 10mg 25mg</p>
 <p>CASTICIN Grade: P CAS#: [479-91-4] Chemical Formula: $C_{19}H_{18}O_8$ FW: 564.49</p>	<p>ASB-00003272-005 ASB-00003272-010</p>	<p>5mg 10mg</p>
 <p>VITEXILACTONE Grade: P CAS#: [61263-49-8] Chemical Formula: $C_{22}H_{34}O_5$ FW: 305.42</p>	<p>ASB-00022845-005 ASB-00022845-010</p>	<p>5mg 10mg</p>

Reference Standard Kits

Product Name	Contents	Product ID	Qty
CHASTE TREE (VITEX) STANDARDS KIT	AGNUSIDE(P) AUCUBIN(P) CASTICIN(P) VITEXILACTONE(P)	KIT-00003384-005 KIT-00003384-010 KIT-00003384-0HK	4 x 5mg vials 4 x 10mg vials 4 x 10mg + C vials

Botanical Reference Materials

Product Description	Grade	Product ID	Qty
CHASTE TREE BERRY (VITEX AGNUS-CASTUS) FRUIT	RGBRM	ASB-00030270-005	5g
CHASTE TREE BERRY (VITEX AGNUS-CASTUS) FRUIT	VBRM	ASB-00030780-005	5g
CHASTE TREE BERRY (VITEX AGNUS-CASTUS) FRUIT	BRM	ASB-00030832-005	5g

Monographs

Product Description	Grade	Product ID	Qty
AHP CHASTE TREE FRUIT MONOGRAPH	BK	ASB-00040070-00B	1 book

Additional Related Compounds

Product Description And Details	Product ID	Qty
AUCUBIN Grade: SH CAS#: [479-98-1] Chemical Formula: $C_{15}H_{22}O_9$ FW: 346.34	ASB-00011086-005 ASB-00011086-010 ASB-00011086-025	5mg 10mg 25mg
BORNYL ACETATE, L- Grade: SG CAS#: [5655-61-8] Chemical Formula: $C_{12}H_{20}O_2$ FW: 196.29	ASB-00002357-001 ASB-00002357-100	1mg 100mg
CHEBULINIC ACID Grade: P CAS#: [5655-61-8] Chemical Formula: $C_{41}H_{32}O_{27}$ FW: 196.29	ASB-00002357-001 ASB-00002357-100	1mg 100mg
EUCALYPTOL(1,8-CINEOLE) Grade: SG CAS#: [470-82-6] Chemical Formula: $C_{10}H_{18}O$ FW: 154.25	ASB-00003385-005 ASB-00003385-010	5mg 10mg
HOMOORIENTIN(ISOORIENTIN) Grade: SH CAS#: [470-82-6] Chemical Formula: $C_{21}H_{20}O_{11}$ FW: 448.38	ASB-00008320-005 ASB-00008320-010	5mg 10mg
ISOVITEXIN Grade: P CAS#: [38953-85-4] Chemical Formula: $C_{21}H_{20}O_{10}$ FW: 432.38	ASB-00009630-005 ASB-00009630-010	5mg 10mg

Product Description And Details	Product ID	Qty
LUTEOLIN-7-O-GLUCOSIDE(CYNAROSIDE) Grade: P CAS#: [5373-11-5] Chemical Formula: C ₂₁ H ₂₀ O ₁₁ FW: 448.39	ASB-00012500-005 ASB-00012500-010	5mg 10mg
ORIENTIN Grade: SH CAS#: [28608-75-5] Chemical Formula: C ₂₁ H ₂₀ O ₁₁ FW: 448.38	ASB-00015381-005	5mg