

The chemical composition of Amazonian plants^(*)

A Catalogue, edited by Setor de Fitoquímica, INPA, Manaus, Amazonas

FAMILY :

Myristicaceae

SPECIES :

Virola venosa (Benth.) Warb.

OCCURENCE : Amazonia (Rio Negro, Manaus; Rio Madeira, Humaitá e Rio Tapajós, Belém).

LEAF :

N,N-dimethyltryptamine
5-methoxy-N,N-dimethyltryptamine

ROOT :

5-methoxy-N,N-dimethyltryptamine

REFERENCE :

S. Agurell, B. Holmstedt, J. E. Lindgren and R. E. Schultes, *Acta Chem. Scand.*, 23, 903 (1969).

FAMILY :

Myristicaceae

SPECIES :

Virola theiodora (Benth.) Warb.
"epená"

OCCURENCE : widespread in Amazonia.

LEAF :

N,N-dimethyltryptamine
5-methoxy-N,N-dimethyltryptamine
2-methyl-1,2,3,4-tetrahydro- β -carboline

FLOWERING SHOOTS :

N,N-dimethyltryptamine
N-methyltryptamine

BARK .

N,N-dimethyltryptamine
5-methoxy-N,N-dimethyltryptamine
N-methyltryptamine
2-methyl-6-methoxy-1,2,3,4-tetrahydro- β -carboline

(*) — Contributions to this catalogue, which will be continued in subsequent issues of this Journal, are invited, and should be submitted to adress given above.

ROOT :

N,N-dimethyltryptamine
5-methoxy-N,N-dimethyltryptamine
5-methoxy-N-methoxytryptamine

REFERENCE :

S. Agurell, B. Holmstedt, J. E. Lindgren and R. E. Schultes, *Acta Chem. Scand.*, 23, 903 (1969).

FAMILY :

Myristicaceae

SPECIES :

Virola sebifera Aubl.
"ucuúba vermelha"

OCCURENCE : widespread in Amazonia

SEED :

ucuuba fat (65%)
composition similar to fat of *V. surinamensis* ¹

BARK :

N,N-dimethyltryptamine ²
2-methyltetrahydro- β -carboline ³

REFERENCE :

1. A. Steger and J. van Loon, *Rec. trav. chim.*, 54, 149 (1935).
2. E. Corothie and T. Nakano, *Planta Medica*, 17, 184 (1969)
3. R. E. Schultes and B. Holmstedt, *Lloydia*, 34, 61 (1971).

FAMILY :

Myristicaceae

SPECIES :

Virola surinamensis (Rol.) Warb.
"ucuúba branca"

OCCURENCE . Lower Amazon

SEED :

ucuúba fat (65%) ^{1, 2, 3}
dilauromyristin (1%)³
laurodimyristin (31%)³
trimyristin (43%)³
lauromyristopalmitin (10%)³
lauromyristo-olein (12%)³
dimyristo-olein (%)³
(small amounts of capric ², stearic ¹ and linoleic ¹ glycerides are included in the indicated percentages)

REFERENCES :

1. A. Steger and J. van Loon, *Rec. trav. chim.*, 54, 149 (1935).
2. G. Pereira Pinto, *Rev. Quím. Ind.* (Rio de Janeiro) ,23, 98, 130, 150 (1954); *Chem. Abs.*, 49, 5861 (1955).
3. D. Atherton and M. L. Meara, *J. Soc. Chem. Ind.*, 58, 353 (1939).

FAMILY :
Myristicaceae

SPECIES :
Virola rufula (A.DC.) Warb.
"epená"

OCCURENCE : Amazonia (Rio Negro, Manaus)

LEAF :

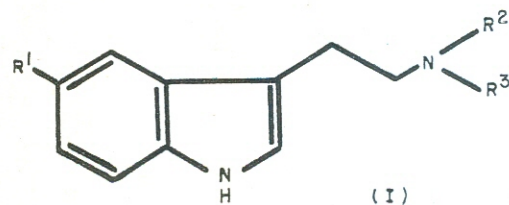
N,N-dimethyltryptamine (Ia)
N-methyltryptamine (Ib)

BARK :

5-methoxy-N,N-dimethyltryptamine (Ic)
N,N-dimethyltryptamine (Ia)
2-methyl-6-methoxy-1,2,3,4-tetrahydro- β -carboline (II)
5-methoxy-N-methyltryptamine (Id)

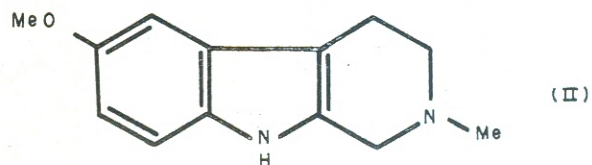
ROOT :

5-methoxy-N,N-dimethyltryptamine (Ic)
5-methoxy-N-methyltryptamine (Id)
N,N-dimethyltryptamine (Ia)
2-methyl-6-methoxy-1,2,3,4-tetrahydro- β -carboline (II)



R¹ R² R³

Ia	H	Me	Me
Ib	H	H	Me
Ic	OMe	Me	Me
Id	Ome	H	Me



REFERENCE :

S. Agurell, B. Holmstedt, J. E. Lindgren and R. E. Schultes, *Acta Chem. Scand.*, 23, 903 (1969).

FAMILY :
Myristicaceae

SPECIES :
Virola multinervia Ducke

OCCURENCE : brazilian Amazonia

WOOD :

1-(2-hydroxy-4-methoxyphenyl)-3-(3,4-methylenedioxyphenyl)-propane ¹
2-hydroxy-1-(2-hydroxy-4-methoxyphenyl)-3-(3,4-methylenedioxyphenyl)-propane ¹
 β -sitosterol ¹
stigmasterol ¹

BARK :

N,N-dimethyltryptamine ²

ROOT :

N,N-dimethyltryptamine ²

5-methoxy-N,N-dimethyltryptamine ²

REFERENCE :

1. R. Braz Filho, M. F. Frota Leite and O. R. Gottlieb, *Phytochem*, 11, 000 (1972).
2. S. Agurell, B. Holmstedt, J. E. Lindgren and R. E. Schultes, *Acta Chem, Scand.*, 23, 903 (1969).

FAMILY :

Myristicaceae

SPECIES :

Virola cuspidata (Benth.) Warb.

OCCURENCE . widespread in Amazonia

LEAVES AND STEMS :

6-methoxytetrahydroharman (I) ¹

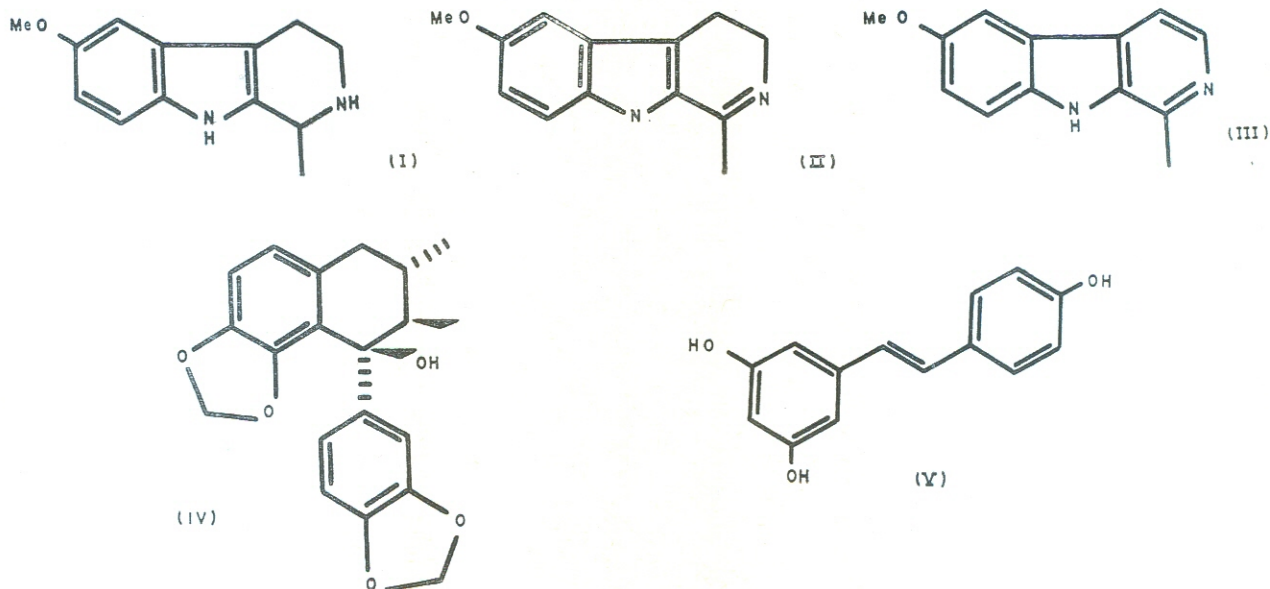
6-methoxyharmalan (II) ¹

6-methoxyharman (III) ¹

BARK :

hydroxytobain (IV) ²

3,4',5-trimethoxy-*trans*-stilbene (V) ²



REFERENCE :

1. J. M. Cassady, G. E. Blair, R. F. Raffauf and V. E. Tyler, *Lloydia*, 34, 161 (1971).
2. G. E. Blair, J. M. Cassady, J. E. Roberts, V. E. Tyler and R. F. Raffauf, *Phytochem.*, 8, 497 (1969).

FAMILY :
Myristicaceae

SPECIES :
Virola calophylla Warb.
"a-re-dje"

OCCURENCE : widespread in Amazonia

LEAF :
N,N-dimethyltryptamine
N-methyltryptamine

FLOWERING SHOOTS :
N,N-dimethyltryptamine
N-methyltryptamine

BARK :
N,N-dimethyltryptamine
5-methoxy-N,N-dimethyltryptamine

ROOT :
N,N-dimethyltryptamine
5-methoxy-N,N-dimethyltryptamine

REFERENCE :
S. Agurell, B. Holmstedt, J. E. Lindgren and R. E. Schultes, *Acta Chem. Scand.*, 23, 903 (1969).