

# The chemical composition of Amazonian plants<sup>(\*)</sup>

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- $\beta$ -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- $\beta$ -carboline

(\*) — Contributions to this catalogue, which will be continued in subsequent issues of this Journal, are invited, and should be submitted to address 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* <sup>1</sup>

BARK :

N,N-dimethyltryptamine <sup>2</sup>  
2-methyltetrahydro- $\beta$ -carboline <sup>3</sup>

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%) <sup>1, 2, 3</sup>  
dilauromyristin (1%)<sup>3</sup>  
laurodimyristin (31%)<sup>3</sup>  
trimyristin (43%)<sup>3</sup>  
lauromyristopalmitin (10%)<sup>3</sup>  
lauromyristo-olein (12%)<sup>3</sup>  
dimyristo-olein (%)<sup>3</sup>  
(small amounts of capric <sup>2</sup>, stearic <sup>1</sup> and linoleic <sup>1</sup> glycerides are includes 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 :

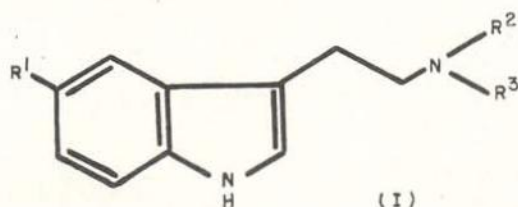
N,N-dimethyltryptamine (Ia)  
N-methyltryptamine (Ib)

BARK :

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

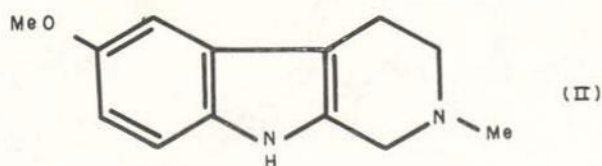
ROOT :

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



R<sup>1</sup>    R<sup>2</sup>    R<sup>3</sup>

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  
 $\beta$ -sitosterol 1  
stigmasterol 1

**BARK :**

N,N-dimethyltryptamine<sup>2</sup>

**ROOT :**

N,N-dimethyltryptamine<sup>2</sup>

5-methoxy-N,N-dimethyltryptamine<sup>2</sup>

**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)<sup>1</sup>

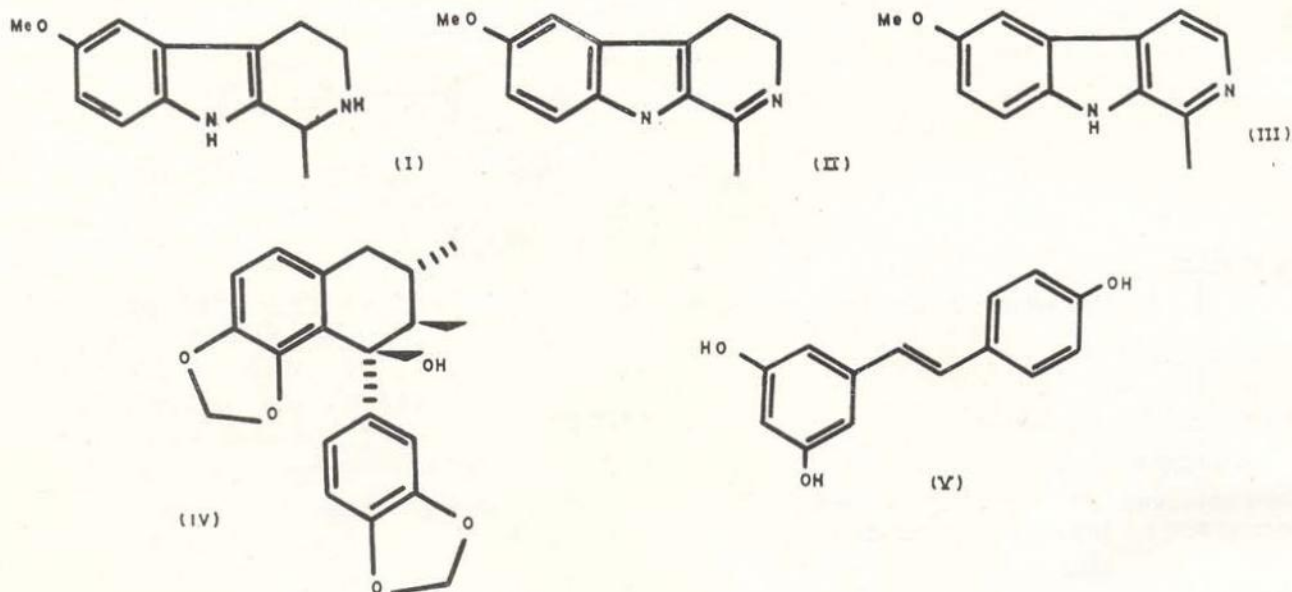
6-methoxyharmalan (II)<sup>1</sup>

6-methoxyharman (III)<sup>1</sup>

**BARK :**

hydroxyotobain (IV)<sup>2</sup>

3,4',5-trimethoxy-*trans*-stilbene (V)<sup>2</sup>



**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 :  
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