



8-Hentriacontanol: - A remarkable marker in *P attenuatum* (A short Overview)

Pharma

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ABSTRACT

P attenuatum, a substitute of black pepper (*P nigrum*) belongs to family Piperaceae distributed in Karnataka, Manley, china & Sri lanka. Plant contains principally B- caryophyllene, piper oxide chlorohydrin, (-) galbelgin, 8-Hentriacontanol & (+)-Crotopoxide as active chemical constituents. 8-Hentriacontanol having a number of activities & isolated recently.

KEYWORDS:

Piper, *P attenuatum*, 8-Hentriacontanol

Introduction:

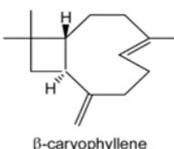
Piper attenuatum (Black Ham), a substitute of black pepper (*P nigrum*) belongs to family Piperaceae is found in Vishakhapatnam of Andhra Pradesh and Madurai and Tirunelveli of Tamil Nadu. As an herbal medicine, different parts of *Piper attenuatum* have been used for the treatment of headache, muscular pain & have been used as a rubefacient. Severally, Wood of plant has been used to treat throat pain and root part possess diuretic activity as well as leaves has been used for their wound healing properties. The Whole plant is reported to contain crotopoxide (a rare phytoconstituent). Which has been reported to exhibits significant anti-tumor activity against Lewis lung carcinoma cell lines.

Studies of photochemical screening have been shown that the plant contain Pip oxide & chlorohydrins as major chemical components. (-) galbelgin & a new aliphatic alcohol 8-Hen triacontanol have also been isolated from the leaves of *P attenuatum*. From assail parts of the plant several asistolactam have been reported. Roots contains alkamides including Piperine, Piperlonguminine & guineesine.¹

History:

Black pepper originated in the western Ghats of Kerala of India (Parry 1969; Rosengarten 1973).

Over 3000 years ago, references to Pepper in ancient Sanskrit texts & Tamil literature used as spice (Agaranuru & Puranaursu). In the 4th century BCE, later on Theophrastus described black pepper (*Piper nigrum*) & long pepper (*Piper longum*). As a culinary spice & table condiments two forms black & white. Dried fruits known as black pepper & after the removal of hull from black pepper white pepper obtained.² As per Genomic Studies, twenty-seven species of Pepper were bound according to the ISSR ³Inter simple sequence polymorphism and only two species *P obliquum* & *P ornatum* were tetraploids & without aneuploidy.⁴ *P attenuatum* (Buck-Ham) flowers are unisexual, green in leak oppose spikes with somewhat zigzag branches & occurs at altitudes up to 3000m.⁵



Chemistry:

Piper attenuatum (Buck-Ham) belonging to family Piperaceae of order Piperales under magnoliopsida class. Commonly named as sayo. *P attenuatum*, a wild species distributed in Karnataka, Mandalay, china & Sri Lanka.⁶ As reported the plant contains β-caryophyllene, 7Pipoxidrin chlorohydrin⁷, (-) Galbelgin⁸, 8-Hentriacontanol,¹⁰ (+) Crotopoxide¹¹ as active constituents.

Conclusion:

P attenuatum belonging to family piperaceae distributed in different parts of the world. Different parts of plant used as mood for throat pain, root as a diuretic & leaves as wound healing. The whole plant contains crotopoxide which has been reported to exhibits a significant anti tumors activity against Lewis lung carcinoma cell lines. Recently isolated & characterized 8-Hentriacontanol reported numerous activities.

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