NOTES ON VETIVER AND OTHER ESSENTIAL OILS

Vetiver:

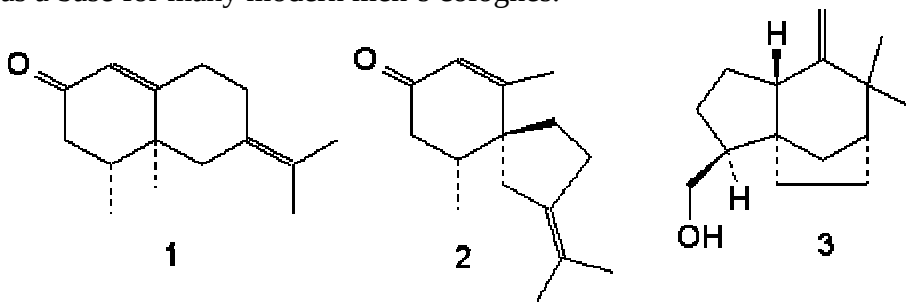
Vetiver oil is obtained from *Vetiveria zizanoides* L., a grass that can be found in both tropical and subtropical parts of the world. The roots of this grass yield an essential oil on steam distillation. The complicated odor profile of vetiver oil is dominated by a woody balsamic tonality of a very special kind. Qualities of vetiver oil that are mainly used in perfumery originate from Java, India, the Reunion Island, Seychelles, and in recent times Haiti, Angola, Brazil and Japan have become sources for this product.

Vetiver oil consists of a complex mixture of more than 150 sesquiterpenoid constituents. The composition and odor quality of the oil is dependent upon its origin. Among the 60 components identified to date, the sesquiterpene alpha-vetivone 1, ?-vetivone 2, and khusinol 3 always occur in the oil in amounts up to 35%. As a result, they are considered to be fingerprints of the oil even though they do not possess the typical odor characteristics associated with vetiver.

Because vetiver oil contains a complicated mixture of sesquiterpenes of differing complex structures, it is unlikely that an economical reconstitution of the oil, will be feasible in the near future.

Vetiver Notes:

Vetiver oil is used as part of the woody notes for luxury perfumes. The oils of vetiver, patchouli and sandalwood in combination with a jasmin and gardenia complex, is the base of the famous Crêpe de Chine note. In addition to its importance in classical perfumery, vetiver oil is also used as a base for many modern men's colognes.



Source: Guenther Ohloff: Scent and Fragrances. The Fascination of Odors and their Chemical Perspectives, Springer-Verlag, Berlin and Heidelberg 1994, p. 172 f.

VETIVER REFERENCE:

Vetiver:

1. A survey of Sesquiterpenoids of Vetiver Oil. S.V. Bhatwadekar, P.R. Pednekar, K.K. Chakravarti & S.K. Paknikar.
2. Review of the work done on vetiver (*Vetiveria zizanioides* Linn.) at the Lemongrass Research Station, Odakkali. E.V.G. Nair, N.P. Chinnamma & R. Pushpa Kumari.

WASINGTON STATE UNIVERSITY RESEARCHER

The terpenoids represent the largest family of natural products and they play many important roles in plants. The lower terpenoids (C10-C20) are principal constituents of the oils and resins that serve in defense against herbivores and pathogens, as attractants for pollinators and seed-dispersing animals, and as competitive phytotoxins. Numerous lower terpenoids are also important as pharmaceuticals, agrochemicals, flavors and fragrances, and renewable chemical feedstocks.

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Croteau's ingenious and creative research has defined the stereochemical mechanism for the biosynthesis of monoterpenes. His studies have produced a paradigm for all terpenoid cyclization reations in plants. Terpenoids have universal physiological and metabolic roles and, in plants, include phytohormones, photosynthetic pigments, defense chemicals, essential oils, and pharmaceuticals.

Croteau's research interests are broad and include the elucidation of metabolic pathways and definition of the corresponding enzymes and genes, the structures and mechanisms of the enzymes of terpenoid biosynthesis and catabolism, the cellular and molecular regulation of metabolism directed toward production of terpenoids of commercial significance and as petrochemical replacements, the origin of terpenoid phytotoxins and phytoalexins and their molecular genetic exploitation in plant defense against herbivores and pathogens, the improvement of constitutive and induced conifer resistance to bark beetle infestation, and the

engineering of plants and microorganisms for the industrial-scale production of terpenoid pharmaceuticals such as taxol, agrochemicals, fragrance materials and synthetic intermediates.

Ruh Khus : An Exotic Perfume and Fragrance of Asia

http://www.internationalfragrances.com/ruh_khus.asp

Vetiver or Khus (*Vetiveria ziazaniodes*) is a grass with a fine spongy root system found growing wild throughout North India. Its roots possess one of the most exotic aromas imaginable which has captivated people for thousands of years. It yields an exotic oil, known as the Oil of Tranquillity in the East.

The wild variety is the "seedy" vetiver which propagates itself through seeds as opposed to the cultivated variety of vetiver which must be propagated by division. Seedy Vetiver oil is extensively used in various essences requiring the deep, mysterious, rich and earthy notes. The wild vetiver seldom finds its way into the international commercial channels. It is entirely consumed within the country. Wild vetiver oil fetches a price four times that of the cultivated variety in India.

Ruh Khus (Wild Vetiver Oil) - The Oil of Tranquility

Khus oil, with its widely varied aromatic traits, cannot be pigeonholed into a stable set of characteristics. One of the most complex oils known, with a multidimensional aromatic profile, which is a challenge to the perfumier. Modern technology has so far isolated over 150 aromatic molecules from vetiver, but still there are the unidentifiable ones.

The finest Khus oil is extracted from plants 18-24 months old. Khus oil is dark, thick and brown, with an almost syrupy consistency, getting thicker with the aroma getting deeper and more intense as the oil matures. The immediate impression is one of powerful earthy diffusiveness, and later a quiet sweetness interwoven with its more earthy tones. As one goes deeper still, one discovers the precious wood notes similar to that of sandalwood or agarwood.

Khus oil is a fixative par excellence as it can unite every part of a composition from the ethereal top notes to the deep base ones. In blends, it takes the front seat, unlike sandalwood oil which wouldn't mind quietly moving to the background. Some oils which blend well with khus oil are patchouly, cinnamon bark, linaloe berry, sandalwood, oakmoss, opopanax and mimosa. It is a heavy oil which needs to be diluted enough so that it does not dominate a blend.

Khus mats provide the most unique form of air-conditioning in India during the hot summer months. The most renowned use for the roots is as screens hung over windows, which keep the room cool on a hot day when they are periodically sprinkled with water. In Northern India, one can find cars with wet Khus covers on the top, to keep its occupants cool.

Essential Oils Supplier

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