



The Phoenix Arises

An analysis of what makes English 'Black Mitcham' peppermint oil captivating.

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One of my earliest recollections from my days in Bush Boake Allen (now International Flavors & Fragrances Inc.) was of my first visit to the rambling bucolic estate that masqueraded as its Long Melford, England, essential oil and extract plant. Bush Boake Allen had only recently been assembled with an evident lack of planning and forethought from three proud old companies: W.J. Bush & Co., Stafford Allen & Sons, and A. Boake, Roberts & Co. Long Melford had been the heart of Stafford Allen & Sons, specializing in superb English distilled oils, spice extracts and raising prize pigs.

My first visit could not really be described as anything approaching a success. I suspect any visitor from another outpost of this newly cobbled-together empire would have been equally uncomfortable. At first sight, this was a little surprising because many of the top positions in the new company were held by Stafford Allen people, so there was little obvious reason for defensiveness. At least, unlike a number of others, I had not been banned outright from further visits, so I persisted. My perseverance was richly rewarded, and I learned a great deal over the years, especially from Arthur Woodgate and Henry Heath. The quality of the essential oils was fantastic, many of them distilled from botanicals grown on local farms. The peppermint, lavender, chamomile and elderflower oils were my particular favorites. Their approach to every aspect of production was distinctly more artisan than scientific, which could make a visitor defensive when talking to visitors about the company's processes, but nobody could argue with the results. Sadly, as with many companies in those days, management was determinedly amateur



and short-term decisions led to continual "rationalization" and production was slowly wound down. Nevertheless, for years I cherished my little bottles of the original oils and saw them as the yardstick against which everything else should be measured.

You can imagine my surprise when I visited the local Bon Appétit store in Princeton a few months ago and saw boxes of Summerdown peppermint creams proclaiming the use of English 'Black Mitcham' peppermint oil. The quality was very good indeed, and I started to do some research. Summerdown is a fantastic 20-year-old project of Sir Michael Colman (from the famous mustard empire) to reintroduce the original 'Black Mitcham' variety of peppermint to England. He now produces a single-estate mint oil on 100 acres of the Hampshire Downs

in the South of England. He was kind enough to send me a sample of the oil (along with an equally stunning organic English lavender oil) and I have to say it is very, very good—so good in fact that it even surpassed my memories of the old Stafford Allen oil. Why is it so good? Here I am indebted to Rob Tyszkiewicz of Wild Flavors, who very kindly analyzed the oil for me. The following components were either present at above 1% or seemed to me to be minor components whose levels contributed to the evident superiority of Sir Michael's oil.

Of the major components (**T-1**), laevo-menthone, 1,8-cineole and germacrene D all seemed moderately enhanced compared against similar American oils, and all would contribute positively to quality. Of the minor components, *cis*-sabinene hydrate, *cis*-ocimene, linalool,

T-1. Analytical highlights from sample of English 'Black Mitcham' peppermint oil

laevo-menthol	(peppermint, cooling)	FEMA# 2665	35.7%
laevo-menthone	(peppermint, clean)	FEMA# 2667	22.7%
1,8-cineole	(eucalyptus, fresh)	FEMA# 2465	6.5%
isomenthone	(peppermint, musty)	FEMA# 3460	4.1%
neomenthol	(peppermint, musty)	FEMA# 2666	3.9%
L-menthyl acetate	(peppermint, cedar)	FEMA# 2668	2.7%
germacrene D	(herbal, sweet)		2.4%
L-limonene	(citrus, light)	FEMA# 2633	2.2%
menthofuran	(creamy, sweet, rubbery)	FEMA# 3235	1.9%
pulegone	(minty, pennyroyal)	FEMA# 2963	1.7%
β -caryophyllene	(carrot)	FEMA# 2252	1.4%
α -terpinene	(citrus, mandarin)	FEMA# 3559	1.3%
isomenthol	(peppermint)		1.2%
α -pinene	(pine)	FEMA# 2903	1.0%
cis-sabinene hydrate	(peppermint, camphor)	FEMA# 3239	0.65%
cis-ocimene	(herbal, mango)	FEMA# 3539	0.62%
linalool	(floral, lavender)	FEMA# 2635	0.39%
cis-3-hexenol	(green, leaf)	FEMA# 2563	0.12%
eugenol	(spicy, clove)	FEMA# 2467	0.06%
isovaleraldehyde	(malty)	FEMA# 2692	0.05%

cis-3-hexenol, eugenol and isovaleraldehyde were all present at enhanced levels and would certainly play a significant part in explaining the overall quality.

Flavor Uses of English 'Black Mitcham' Peppermint Oil

High-class confectioneries, such as my Summerdown mints, are perhaps the most satisfying flavor uses of this exquisite oil. Nevertheless, there are quite a few natural fruit flavors that could benefit from subtle additions.

Blackcurrant: Of all fruit flavors, peppermint oil is perhaps most at home in natural with other natural flavors (WONF) blackcurrant flavors. Quite high levels can work well, but my preference is for more subtle additions in the region of 600 ppm.

Peach: Levels can also vary in natural peach flavors, but I think lower levels work best. A level of 300 ppm is a realistic starting point.

Blueberry: A little complexity is always welcome in natural blueberry flavors, and Summerdown peppermint oil fits in well at 150 ppm.

Lychee: Lychee may seem a surprising use for this essential oil; the flavor is really quite light and predominantly floral. Nevertheless, the addition of 100 ppm of this peppermint to a natural WONF lychee flavor is surprisingly attractive.

Melon: Melon flavors, especially watermelon flavors, can tend to veer off in a fantasy direction, pleasant but not authentic. Summerdown peppermint oil adds a touch of authenticity at 80 ppm.

Raspberry: Just a hint of this essential oil is all that is needed in natural raspberry flavors, starting around 50 ppm.

Passion fruit: Trace levels, around 30 ppm, also perform well in passion fruit flavors, adding a little extra realism and depth.

Flavors are by no means the only uses of this peppermint oil. Ruth Mastenbroek, the renowned creator of fine fragrances and former president of the British Society of Perfumers, has worked extensively with Sir Michael and has thankfully (I'm sure none of you really wanted to read me writing about

fragrances) agreed to help me with this article.

Fragrance Uses of English 'Black Mitcham' Peppermint Oil

The wonderful 'Black Mitcham' peppermint of Summerdown seems to nod to the past in its quality, fullness and depth of character. It is quite distinct from general commercial grades from bulk-growing areas, with a unique quality that distinguishes it from other, lesser grades.

Right from the top, it is clean and radiant, with a vibrant, full-bodied character and a florality that I believe sets it apart from other peppermint oils. The mint character continues on into the heart notes for several hours. Perfumers can happily use the Summerdown oil in a broad selection of fragrance types, and at varying levels.

I was delighted to be invited to create a fragrance for home and body products to celebrate the Summerdown peppermint. I combined it with Summerdown spearmint, both at quite high levels, as well as citrus, green and fruity notes, and was impressed by how well the mint notes stood up against some very powerful ingredients. It works well in masculine fine fragrance, especially fougères and citrus colognes, but also in orris/sandalwood types, and of course with marine notes. In dilution, it can lift and brighten the top notes of feminine fragrances, especially citrus notes, but also in combination with aldehydes and floral notes.

I have used the Summerdown peppermint successfully in candles and diffusers, shower gels, lotions and even soap, where its relative long-lastingness is very useful. With jasmine and rose it can be a nuance or contribute to the main character of the fragrance, while with spicy and green notes it can give an explosive freshness. The reader may have noticed that I have become a real fan of this superb oil.

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