

Focus on Citrus

WFFC UK event hosts citrus experts.

Leanne Stewart, president, WFFC UK

Writing on behalf of the Women in Flavour & Fragrance Commerce (WFFC) United Kingdom (WFFC UK), I am pleased to report on a successful symposium held on March 27, 2014, at RC Treatt in Bury St Edmunds. Our citrus theme was highly topical, attracting attendees from across the United Kingdom and drawing new faces to the industry who had come to learn.

Introduction to Citrus

John Forbes, global technical support manager, Treatt, gave a talk that was designed to fill in any gaps in attendees' citrus knowledge. His clear passion and knowledge on citrus was evident. He covered citrus from numerous angles, including cultivation and processing, chemistry and composition, essential oil concentration and fractionation, and aroma and flavor.

Pomelo, he said, is the "daddy" of citrus fruit as we now know it. The industry uses the byproducts of the fruit industry. It takes 1 tonne of oranges to produce 3 kg of orange oil. Smelling strips were passed round as the audience worked its way through a list of citrus examples.

Conventional and Organic Citrus Oil Markets

Mary Brooks (Earthoil Plantations/RC Treatt) covered the when, where and "how much" of conventional and organic citrus oils. Working through the citrus varieties, she discussed origins, harvest, volumes, major players, market influence (with volatility factors such as the fresh fruit market, weather, disease, increased production costs, supply and demand) and organics. The issues that affect orange also affect other citrus fruits. Brooks also covered the number of factors that led to the orange oil volatility over the past five years. She also explained that China is the world's second biggest producer of oranges, which are currently consumed internally as fresh fruit. China is being watched to see what citrus fruit will be coming out of country.

Low-level Contaminants in Citrus Oils

Sources of contamination in citrus oils come mostly from agriculture (like pesticides), the environment, processing, packaging and additives (synthetic antioxidants), said Nick Peake development chemist at Treatt. Many pesticides are restricted in Europe and the United States. DDT, an organochloride, is banned for agricultural use in most of the world. There are pesticide regulations by individual bodies in individual countries, and there are differences between E.U. and U.S. regulations. Pesticide



From left, Nick Peake (Treatt); Leanne Stewart, president, WFFC UK; Mary Brooks (Earthoil Plantations/RC Treatt); and John Forbes (Treatt).



WFFC UK Committee present on the day. From left to right: Sue Wright, Moya Pamplin (Topaz International), Leanne Stewart (WFFC UK), Charlotte Catignani (Treatt) and Julie Tampsett (Prinova Europe).

markers can be used in citrus oils as a way of fingerprinting where the oils come from. Contaminants can be looked for using GC, LC and mass spectrometry.

Special thanks to Charlotte Catignani, RC Treatt, for coordinating this event. Look for future meetings at www.perfumerflavorist.com/events/calenda.

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