

COLUMN FOR SOAP, PERFUMERY AND COSMETICS DECEMBER ISSUE

Anthony C. Dweck,
Consultant, Dweck Data

The best of this Millennium

As the trees once again shed their leaves (isn't nature wonderful?) and Railtrack find new excuses for the trains not to run on time, it is pleasant to reflect from the comfort of my office the wonderful achievements that man has made in the last thousand years.

Theophrastus Bombastus von Hohenheim (better known to us as Paracelsus founder of the Doctrine of Signatures), Abbess Hildegarde von Bingen, John Gerard, Nicholas Culpeper and Carl Linnaeus (after whom the Linnean Society of London was formed in 1788) have all produced milestones in the history of herbalism. In more recent times René-Maurice Gattefossé and Jean Valnet pioneered the use of essential oils and coined the term 'Aromatherapy'.

There are many others who deserve praise for their contribution to the natural world, these would include the great stars like Sir David Attenborough, and Prof. David Bellamy (both honorary Fellows of the Linnean Society) who have brought the botanical world to life in our living rooms. Academics like Prof. Peter Houghton, Dr. Simon Mills and Prof. David Philippon who have encouraged students to study and enjoy the fascinating chemistry and pharmacology of natural materials.

The retailer who has contributed most to naturals is awarded to Body Shop, though it was probably Mary Quant, who was the first person to launch a 'natural' range called "Special Recipes" in the early 1970s. Best brand goes to Clarins for terrestrial plants, Phytomer for marine derivatives, Espa for the least use of synthetics and Lush for the most fun.

In the world of botanicals there are so many achievements that choice becomes difficult. In more distant times the willow (*Salix alba*) gave us salicin and acetyl salicin as did Meadowsweet (*Spiraea ulmaria*), from which Aspirin was first synthesised as one of the first analgesics. More powerful would be codeine from the opium poppy (*Papaver somniferum*), and cocaine from coca (*Erythroxylum coca*).

Today, one would have to nominate the yew tree (*Taxus baccata* and *T. brevifolia*) for its taxol content to treat ovarian cancer and the vinca alkaloids (*Vinca rosea*) and vinblastine (*Catharanthus roseus*) for the treatment of leukaemia and solid tumours. Let us not forget that many of the steroids (hydrocortisone and corticosteroids) were first prepared from the South

American wild yam (*Dioscorea villosa*) as were the first oral contraceptives.

The beautiful snowdrop (*Galanthus nivalis*) gave us galanthamine (Shire Pharmaceuticals) for chronic fatigue syndrome and Alzheimer's disease. A relative of green tea (*Camellia sinensis*) popular in our industry for its antioxidant and free-radical scavenging effect was first exploited for its theophylline content and has helped many an asthma sufferer with its bronchodilating effect.

Liquorice (*Glycyrrhiza glabra* and *G. uralensis*) has provided carbenoxolone (the sodium salt of a succinic acid ester of glycyrrhetic acid) a useful treatment for gastric ulcers. This plant and its actives are also providing our industry with materials that can heal severely damaged skin.

The Chamomiles (German, *Matricaria recutita* and Roman, *Anthemis nobilis*) have between them been amongst the earliest of plants available to the cosmetic scientist. The bisabolol, azulene derivatives and flavonoid apigenin have made this healing, soothing and anti-inflammatory plant a high street success. The pharmaceutical industry have also enjoyed success with Kamillosan, and the health food industry have sold many bags of the restive tea, found to be so useful in cases of insomnia and stress. The cicatrising effects of rosehip seed oil and the mass of clinical data produced would be another worthy winner.

However, my award for the most successful plant (including retailing revenue) has to go to Aloe vera (*Aloe barbadensis* Miller) for its soothing, cooling and remarkable properties. The most recent studies have proven that the gel from this plant will 'switch off' skin cell reaction to ionising, thermal and UV-radiations to a value that would correspond to a SPF value of about 4. This is not because aloe gel absorbs radiation at any wavelength, but it works to prevent the cells responsible for erythema from triggering a reaction up to that value (when used prophylactically).

As the lights go out on the last moments of this millennium, it is good to know that the research into naturals continues with enthusiasm and dedication. The South American rainforest continues to yield new and exciting actives, interest in Ayurvedic, Unani and Siddha medicine from the Indian continent is leading to fascinating new ranges, with Chinese and Kampo medicines beginning to open up new areas for exploration. The secrets of the Australian aborigines, the medicinal plants of Vietnam, Philippines, Africa and Sri Lanka are just some of the buds waiting to open fully at the very start of this blossoming new millennium.

Finally, I was trying to decide which herbal producer should get the award of the millennium and this was difficult. There are so many classes that could be considered. Codife and Secma for their pioneering work on seaweeds, Indena for their contribution to the science of botanicals, William Ransom & Son for being the oldest surviving UK producer, Campo Research for producing the first CD ROM of any significance, and Karlshamns for the best free book. Cosmetochem have

the award for being the most enthusiastic and for having the most amazing roof garden of wild herbs that I have ever seen. My overall award (for pure nostalgia) goes to Dragoco, who have an indelible place in my heart for their Extrapone complexes that I first used nearly thirty years ago and which probably sparked the love of botanicals that I have kept to this day.