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## **Editorial**

Your attention is directed to the accompanying statement issued by the International Organization of the Flavor Industry (IOFI), which deals with the regulatory and safety aspects of flavorings. The Working Group on Methods of Analysis of IOFI recommends analytical methods for the control of flavorings and evaluates reported identifications of flavoring substances in natural source materials. Natural occurrence may be of importance for determining the legal status of a flavoring substance and is also taken into account for its safety evaluation.

IOFI proposes that certain requirements, which are spelled out in the accompanying statement, should be met to avoid mistaken identification. Henceforth, the *Journal of Agricultural and Food Chemistry* will insist on a strict adherence to these requirements by all papers submitted to this journal that involve the identification of flavoring substances. Furthermore, as part of the peer review process, this statement will accompany all such papers when they are sent to referees.

Swin E. Friener

Statement on the Identification in Nature of Flavoring Substances Made by the Working Group on Methods of Analysis of the International Organisation of the Flavour Industry (IOFI). Members of the Working Group are at present P. Liddle (Chairman), A. Chaintreau (Switzerland), A. D. Dijkhuizen (Belgium), P. Frints (Netherlands), M. Güntert (Germany), P. G. Hoffmann (United States), G. Lösing (Germany), J. Mane (France), H. P. Schwenk (Switzerland), S. Signer (Switzerland), A. Scotti (Italy), A. Sherlock (Great Britain), and F. Grundschober (Secretary).

The IOFI Working Group on Methods of Analysis evaluates the validity of identifications of flavoring substances which were previously listed as artificial. Over the period of time in which this work has been undertaken, it has become apparent that a more thorough inspection of evidence is necessary to avoid mistaken identifications.

The Working Group has discussed this problem in depth and has expressed a unanimous opinion that the criteria given below have to be met before a decision on such a nature-identical status can be made.

Any identification must pass scrutiny by the latest forms of available analytical techniques. In practice this

means that any particular substance must have its identity confirmed by at least two methods, e.g. comparison of chromatographic and spectroscopic data (which may include mass, IR, and NMR spectra) with those of an authentic sample (see *Z. Lebensm. Unters. Forsch.* **1991**, *192*, 530–534).

The Group is aware of the possibility of artifact formation as well as contamination from a variety of sources. These characteristics also have to be taken into account in assessing the validity of the reported identification.

In the case of published artificial flavoring substances, the evidence for identification must be published in a form that is open to public inspection. Private communications are useful only to clarify points of ambiguity and should not be used as a substitute for publication

Nature-identical substances that are kept confidential do not fall within the terms of reference of the Group. However, where confidentiality is required, the Group recommends that the manufacturer record the evidence according to the criteria stated above. This would then be available for inspection at a later date, if required.

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