

Yeast Extracts in Organic Products

News and Views from the Organic Food Sector



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Background

Yeast extract is used as an ingredient in organic foods but is being increasingly critically viewed in the media and by consumers as it is assumed to have similar effects to those discussed for synthetic flavour enhancers. Even some people involved in the organic food industry see yeast extract as an ingredient that does not align with the principle that organic food is food in its natural state.

In this research project scientifically based evidence both for and against the use of yeast extract in organic foods was sought and sensible alternatives to it were to be identified.

The project was initiated by the German Organic Processors and Traders Association (Bundesverband Naturkost Naturwaren Herstellung und Handel e.V. (BNN)) and was carried out in cooperation with the University of Applied Sciences Münster from February to December 2009.

Methods

- Literature research (nutritional studies, consumer perspective (requests to AID-Infodienst, a state funded consumer information website), production of yeast extract → to establish status quo
- Manufacturer-workshop – presentation of results and discussion → for knowledge transfer and discussion
- Survey of organic food producers (questionnaire in written form, n=35, response rate of 63%, 3 deep interviews with experts → identify operational praxis)

Results

Scientific Studies

- almost no scientific studies concerning yeast extract or its nutritional-physiological effects could be found
- Studies about monosodium glutamate point to controversial issues and can not be applied to yeast extract
- results do not allow a decisive scientific statement
- as from 2010 the revised EU organic regulation demands using certified organic yeast extract for organic products

Consumer view

- consumers are interested in yeast extract as ingredient in both organic and conventional products and the nutritional-physiological effects
- misunderstandings concerning the wording glutamate and yeast extract, the use of yeast extract is critically discussed
- consumers are uncertain, they ask for information and expect transparent labelling
- dichotomy: consumer want organic food to taste natural, but they also like the umami taste

Organic Processors

- inhomogeneous answers show controversial discussion
- 59% of the companies surveyed use conventional yeast extract (fig. 1) though 82% exclusive produce organic products
- 55% of the companies surveyed receive critical consumer requests concerning yeast extract
- Popular flavours are not possible without yeast extract: sensory profile is the most important reason for the use of yeast extract (fig. 2)
- For 59% of the companies surveyed the use of alternatives is not necessary, some do not know any alternative, others name for example celery, the combination of certain spicery or the use of organic yeast extract
- Some producers already use organic yeast extract or change the product recipe to avoid yeast extract completely; this change demands high development costs

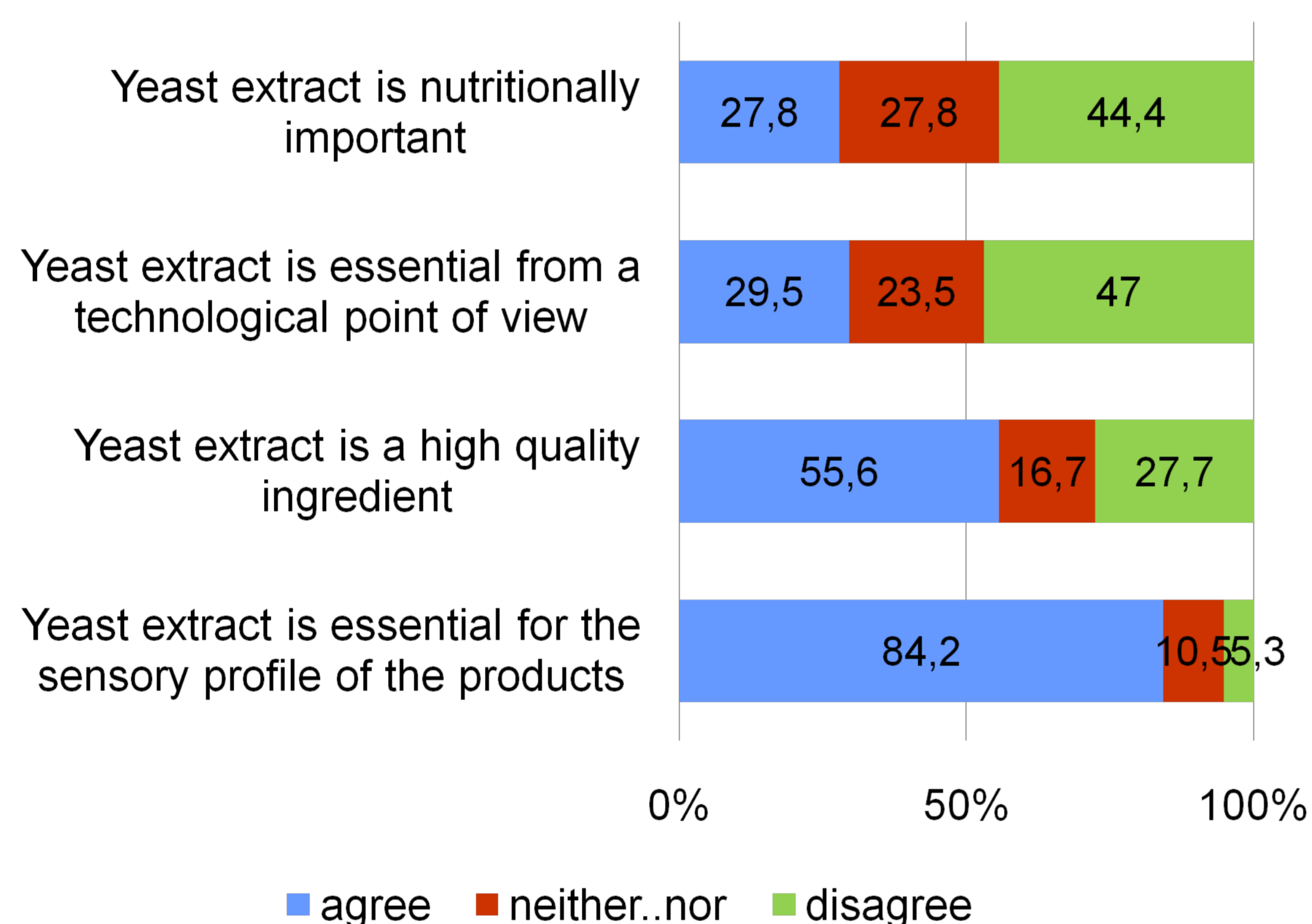


Fig. 2: Reasons for the use of yeast extract in organic food (n = 22)

In which quality yeast extract is used in your products?

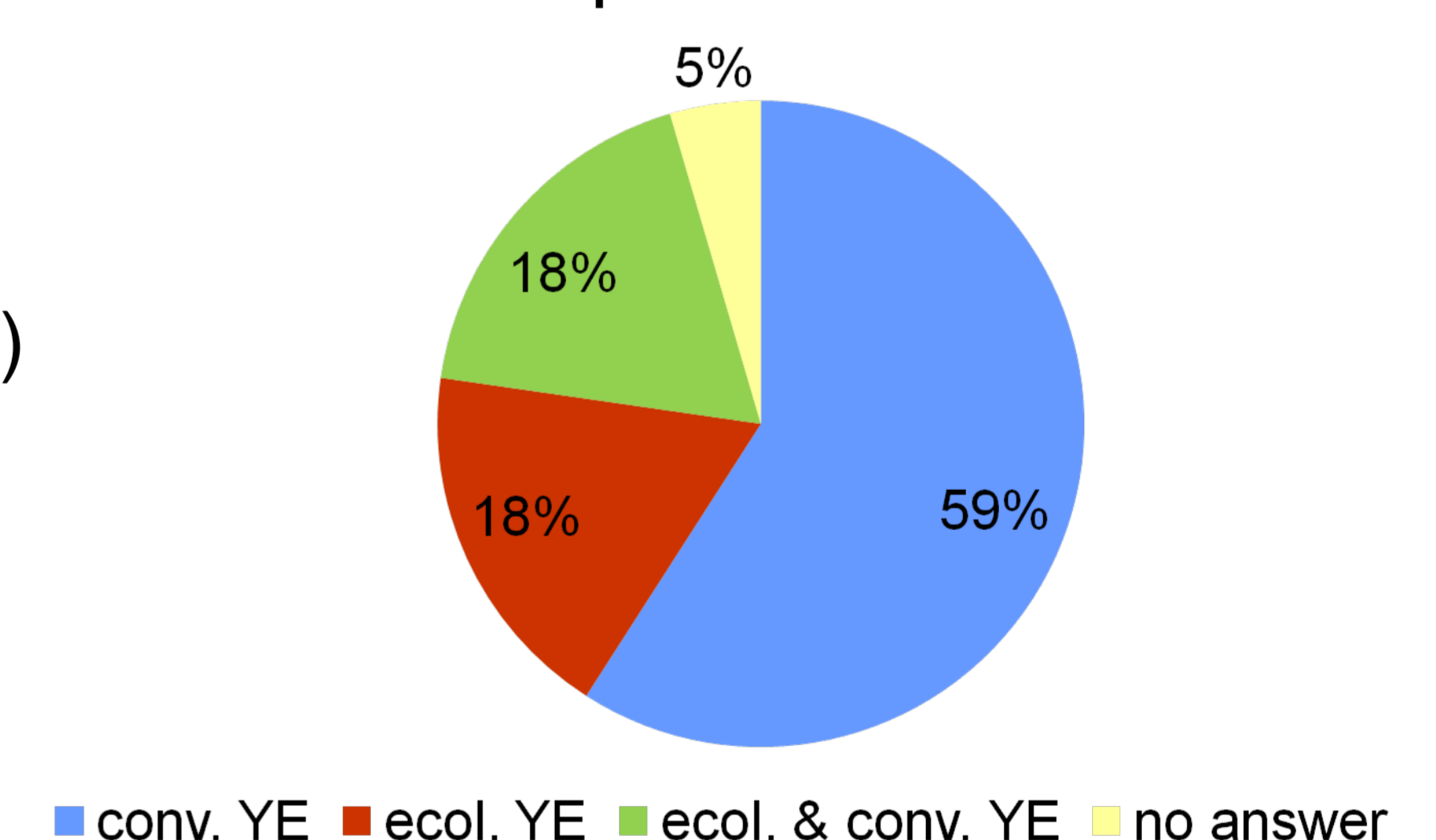


Fig. 1: Use of yeast extract (YE) in different qualities

Conclusions

On current data it is not possible to give a decisive statement either for or against the use of yeast extract in organic food

A transparent communication towards the consumer is fundamental: the differentiation of the wordings 'glutamate' and 'yeast extract' is important

Producers of organic products are aware of these consumer interests and the revised regulatory framework

Numerous approaches for further research could be identified

Quotations

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Acknowledgements

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