



Microgreen flavour diversity

What we did

Over six sessions in fall 2023, we evaluated microgreens and baby greens with our trained sensory panel.

Microgreens are seedlings of edible vegetables that are harvested seven to 21 days after germination. We wanted to explore this product category and define differences in flavour, taste and texture.

The products

All products were purchased at local grocery retail outlets. Microgreens were selected based on availability, not on how or where they were produced. Over the course of the project, our panelists evaluated 12 micro and baby greens:

1. micro broccoli
2. micro arugula
3. micro sunflower
4. mustard microgreens
5. pea shoots
6. micro radish
7. baby spinach
8. baby kale
9. spicy mustard medley
10. micro bok choy
11. water cress
12. micro kale



Fig 1. Panelist sample tray of microgreens

Products were all tasted blind in a random order, under red lighting and only identified with a three digit code to avoid bias. Extended breaks and rinsing were implemented during tasting to avoid sensory fatigue from spicy and strongly-flavoured samples.

The method

We used a combination of sensory methods to explore the flavour diversity of microgreens and identify representative samples that can be used to define key differences in flavour, taste and texture in the product space.



What we found

Four representative samples with distinct flavour profiles were identified that differentiated the microgreens based on flavour, taste and texture characteristics. These profiles are described below with word clouds.

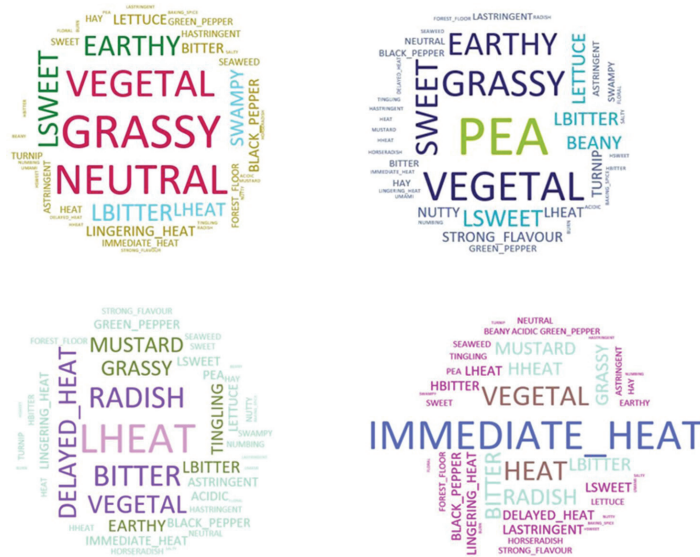


Fig 2. Word clouds of the panelists' descriptions of the four representative samples. The larger the text, the more times that term was used to describe the sample (L=low; H=high). From left to right, top to bottom: micro broccoli, pea shoots, micro mustard and micro arugula.

Relevance to growers/producers

Understanding and describing the flavour profiles in a product space can be used to differentiate products at point of sale, through microgreen-specific messaging and implemented into a marketing strategy. This can be especially useful for newer product categories, like microgreens, where consumers may be less familiar with the category diversity.

Questions? Looking for more information?

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