

Informal Test of Fresh Fig Cultivar Acceptability

Gayle Crisosto, Stephanie Dollahite, Ed Stover, Louise Ferguson, Vanessa Bremer and Carlos H. Crisosto

Executive Summary

- From this informal test, ‘Ishia’, ‘Panache’, and ‘Zidi’ appear to be highly acceptable fresh fig cultivars.
- The development of which sensory attributes of fresh figs are the most important ones affecting consumer choice to eat them will need to be addressed for future studies.

Objective

- Demonstrate and test the acceptability a few fresh fig cultivars/selections and begin to collect information on the flavor description of those cultivars/selections for future studies.

Materials and Methods

During the Fig Open House held on September 1, 2005 at the Kearney Agricultural Center, Parlier, CA, a group of fourteen members of the fig industry and researchers participated in an informal taste panel of five fresh fig cultivars/selections and ‘Kadota’ fig held under air and controlled atmosphere CA storage at 32°F for 2 weeks, which were available at the time. The cultivars/selections tasted were ‘Ishia’, ‘Panache’, ‘Snowden’, UCR K6-5, and ‘Zidi’. Panelists were presented one half of a fruit of each cultivar/selection in a soufflé cup with a scorecard for each sample. Panelists were instructed to cleanse their mouths with water, then to taste the sample and circle the word that best described their overall opinion of the sample: “unacceptable”, “undecided”, or “acceptable”. Next, to circle “Yes” or “No” for the presence of “off flavor” in the sample. Then, if possible, describe the predominant flavor of the fruit sample and rinse their mouth out with water before proceeding to the next sample to cleanse their palate. Also, a “Comments” area was provided on the scorecard if they wished to say anything about the fruit sample’s characteristics positive or negative

Results

Acceptability. Of the five cultivars/selections tasted by this informal panel, three were considered acceptable: ‘Ishia’ (86%), ‘Panache’ (86%), and ‘Zidi’ (93%). The other two cultivar/selections: ‘Snowden’ and UCR K6-5 were unacceptable to 50 and 43% of the participants, respectively. This may have been due to off flavor which was detected by 33% of the participants for ‘Snowden’ and 38% of the participants for UCR K6-5. Also, approximately

30% of the participants were undecided as to whether or not these two cultivar/selections were acceptable.

The 'Kadota' held in air storage at 32°F for 2 weeks was acceptable to 71% of the participants, while only 39% of the participants accepted 'Kadota' held in CA storage at 32°F for 2 weeks. The lack of acceptability for the 'Kadota' held in CA may have been due to off flavor which was noted by 25% of the participants. The off flavor noted by the participants may have been an effect of maturity, i.e. the CA storage may have delayed the ripening of the fruit.

Flavor description. The flavor descriptions of the tested cultivars/selections are shown in Table 2. For each of the cultivars/selections tasted there were numerous, diverse descriptors for the flavor and texture. This demonstrates in just a small group of untrained people the need to educate consumers on the unique characteristics of fresh figs and the diversity of flavors, textures and colors of the available fresh fig cultivars.

Comments

The comments from the participants are given in Table 3. The diversity of positive and negative comments demonstrates the need to address several sensory attributes for fresh figs when using sensory evaluation to establish quality criteria, compare preharvest or postharvest treatments and/or establish maturity indices for specific cultivars or groups of cultivars with similar characteristics. These attributes include but are not limited to: sweetness, sourness, characteristic flavor of the flesh and skin, characteristic aroma, texture of both the flesh and the skin, seediness and seed texture.

Conclusions

- From this informal test, 'Ishia', 'Panache', and 'Zidi' appear to be highly acceptable fresh fig cultivars.
- From this informal test, off flavor or possibly lack of ripeness was detected on 'Kadota' held for 2 weeks under CA at 32°F, but not on the air stored fruit.
- The development of which sensory attributes of fresh figs are the most important affecting consumer choice to eat them will need to be addressed for future studies.

Table 1. Acceptance and off flavor of fresh fig cultivars/selections tasted by an informal panel of 14 participants at the Fig Open House held on September 1, 2005 at the Kearney Agricultural Center, Parlier, CA.

Cultivar/ Selection	Acceptable (%)	Undecided (%)	Unacceptable (%)	Off flavor (%)
Ishia	86	7	7	8
Panache	86	14	0	0
Snowden	21	29	50	33
UCR K6-5	21	36	43	38
Zidi	93	7	0	0
Kadota – Air	71	22	7	0
Kadota - CA	39	15	46	25

Table 2. Flavor description of fresh fig cultivars/selections tasted by an informal panel of 14 participants at the Fig Open House held on September 1, 2005 at the Kearney Agricultural Center, Parlier, CA.

Cultivar/selection	Flavor description
Ishia	Sweet, brown sugar w/traditional fig flavor, tart, fruity, berry-like, grassy, and earthy.
Panache	Berry, raspberry, strawberry, sweet & tart.
Snowden	Slight stone fruit, slightly nutty, sweet, sweet brown sugar, neutral, grassy, and latex.
UCR K6-5	Citrus, bell pepper, slightly bitter, cranberry & raspberry flavor, sour, acid, tart, and grassy.
Zidi	Slight berry flavor, strawberry, smooth sweet taste, watermelon & strawberry flavors, fruity, and balanced flavor w/ some acid.
Kadota - Air	Neutral, honey flavor, tart, maple flavor, bland, melon flavor, and slightly sweet.
Kadota - CA	Honey, watered down flavor, sweet, neutral, old grass, and no flavor.

Table 3. Comments for fresh fig cultivars/selections tasted by an informal panel of 14 participants at the Fig Open House held on September 1, 2005 at the Kearney Agricultural Center, Parlier, CA.

Cultivar/selection	Comments
Ishia	Very sweet, neutral flavor-boring, very bland, great color, a lot of seeds, and very nice.
Panache	Very good, great flavor, thick skin, nice flavor, very sweet, incredible color, striped fruit is very attractive, very good flavor, and looks pretty.
Snowden	Very bland, OK but nothing special, very good, not too sweet, great internal color, astringent, under ripe, no flavor, probably not ripe, too dry & thick skin, gelatinous texture, dry and crunchy seeds, and not ripe.
UCR K6-5	Interesting & different, has too much of a vegetable component, hard to describe, didn't seem ripe enough, latex makes lips tingle, sticky, immature, too acid, and good firmness.
Zidi	Not ripe, good, almost as good as 'Panache', very good, great color, mealy texture, not very tasty, "I like the mushy texture", don't like the skin, nice to look at, crunchy seeds, and "dense" texture.
Kadota - Air	Bland, under ripe, not very strong, skin flavor dominates, good flavor, really mushy texture, don't like thick skin, and crunchy seeds.
Kadota - CA	Very good, boring, much better than the Kadota - Air sample ,but of similar ripeness, no flavor, not as firm as Kadota - Air sample, mealy, slimy texture, and has sticky liquid inside - unappealing.