Archived at https://orgprints.org/10134/

Reference:
Weibel, F.P. and Leder, A., 2004. Consumer reaction to the «Flavour Group Concept» to introduce scab resistant apple varieties into the market. «Variety Teams» as further development of the concept. In: F.Ö.O.e.V. Weinsberg (Editor), ECO-FRUIT; 11th International Conference on Cultivation Technique and Phytopathological Problems in Organic Fruit-Growing, LVWO, Weinsberg/Germany, pp. 196-201.

Consumer Reaction to the «Flavour Group Concept» to introduce Scab Resistant Apple Varieties into the Market. «Variety-Teams» as a Further Development of the Concept

Konsumenten-Reaktion auf das «Geschmacksgruppen-Konzepte» zur Markteinführung schorfresistenter Apfelsorten. «Sorten-Teams» als weitere Entwicklungsstufe des Konzepts

Franco Weibel[1] and Alfred Leder[2]

Abstract

A tool to ease the market introduction of scab resistant apple varieties in supermarkets, is the so-called «Flavour Group Concept (FGC; Weibel and Grab, 2000) that has been developed by FiBL and «Coop» (second biggest supermarket retailer of Switzerland) already in 1995. The FGC is providing to the buyers additional information on the specific flavour direction of that "unknown" apple cultivar in front of them (mild to sweet; spicy-tart; predominantly tart). In 2002 a consumer behaviour study was undertaken by «IHA/GfK-Switzerland» Institute to evaluate the consumer response to the FGC.

The results reveal that 36 % of the persons interviewed at the point of sale considered additional information on the flavour direction of the apple cultivars as «important» and 40 % as «very important». Information on flavour direction was considered as the second important information at the shelf (59 % score), compared to the general presentation of the apples with 78 % score. On basis of these positive results, Coop introduced the FGC also for conventional apples. One year later, also the biggest supermarket retailer of Switzerland «Migros»introduced a FGC for organic and conventional apples.

To develop further the FGC, in the year 2002, a consortium of the supermarket chain Coop-Switzerland, organic apple growers, retailers and FiBL experts joined together in a so-called «Variety Team». There, in contrast to Variety Clubs, the focus is not a particular variety but the active creation and promotion of an attractive assortment of scab resistant apple varieties in a well co-ordinated and thus for growers and retailers most efficient way. Investments and risks are evenly shared between the Team Partners. The first cultivar promoted is «Ecolette».

Keywords: *Venturia inaequalis*, apple, cultivar, resistance, market introduction, flavour group concept, consumer poll, variety team

Introduction:

Increasingly supermarkets sell organic fruit, in particular apples. However, in super or hypermarkets it is very hard to introduce new or unknown apple varieties. Today, this dilemma is a grave obstacle for the wide spreading of scab resistant apple varieties in organic *and* conventional production although these varieties would show the way to remarkable ecological and economic progress.

Additionally, the trend in the apple market towards globalization, with a limited number of worldwide traded cultivars strongly counteracts efforts to introduce additional cultivars in generally small quantities.

Most currently available disease-resistant cultivars will probably be quite short-lived as constantly new cultivars with improved production, eating and processing quality are being bred and put on the market.

1) Forschungsinstitut für biologischen Landbau (FiBL), 5070 Frick, Switzerland (franco.weibel@fibl.org)
2) Coop-Schweiz; Category Management food and vegetables, 4050 Basel (alfred.leder@coop.ch)

In order to utilize the advantages of disease-resistant cultivars despite these difficult conditions prevailing in the marketplace, new marketing concepts have to be devised for them. A tool to improve the market introduction of scab resistant apple varieties in supermarkets, is the so-called «Flavour Group Concept» (FGC;Weibel and Grab, 2000) that has been developed in Switzerland by FiBL and «Coop» already in 1995 (Coop is the second biggest super market chain in Switzerland). Beside information on the variety name the FGC is providing to the consumers additional information on the flavour direction of the fruit in three main groups: (i) *mild to sweet*; (ii) *spicy-tart*; (iii) *predominantly tart*).

A first evaluation of the practical success of the FGC on the level of the retail (purchase and selling side) was carried out in 2000 and revealed very positive results (Weibel and Grab, 2000). However, there the consumers in the shops were not involved. To seal this information gap, in October 2002 a consumer behaviour study was undertaken by «IHA/GfK-Switzerland» Institute to evaluate the consumers' reaction to the FGC.

Material and Methods:

Client:	Coop Switzerland, Marketing Research Department
Institutes:	«IKH/GfK-Switherland» Institute, CH-Hergiswil, a specialized Institute for consumer polls and market studies.
Location, Date:	The studies were carried out in the IKH/GfK Test Studio at Luzern (Switzerland) during October 14-17 2002.
Method:	In the shopping mail of Lucern City, IKH/GfH staff asked persons whether they would like to participate at a marketing test and interview. In the test studio these persons could look for two minutes at a shelf for apple selling showing the FGC as it is in the Coop shops (variety name, flavour group, origin of production, no indications of prices). Apples of the 3 flavour groups were presented according to the FGC consumer information layout. The varieties were: Gala for *sweet to mild*, Elstar for *spicy-tart*, Boskoop for *predominantly tart*. The apples were presented attractively and unwrapped in a 1-layer fruit bin. The method was discussed and optimized with FiBL experts previously.
Interviewed persons:	Household keeping persons between 20 to 60 years, responsible for the shopping of the household. They buy and consume apples at least once per month from a supermarket (Coop or Migros).
Sampling:	120 interviews were carried out and quoated by age, sex, profession and size of household. *Sex:* male 20 % (24); women 80 % (96) *Age:* 20-35 y 50 % (60); 36-60 y 50 % (50) *On a job:* yes 51 % (61); no 59 % (59) *Household*: 1-2 persons 51 % (61); ≥ 3 persons 49 % (59) *Shopping*: frequent 35 % (42); medium 65 % (78) *Apple buying:* frequent 72 % (86); medium 28 % (34) *Preference:* Coop 35 % (42); Migros 58 % (70); others 7 % (8) *Organic prod.:* very important 25 %; not decisive 60 %; not important 15 %
Questionnaire:	Fully structured, mean time per interview: 20 minutes.
Statistical Analysis	With SPSS-Quantum including the breaks sex, age, size of household, profession, frequency of fruit buying, preferred super marked.

Results and Discussion

Table 1 shows some questions asked to the test persons and the percentage of their answers. With 68 % yes the recognition of the FGC in the shops is surprisingly good. The recognition at the test shelf was quite good with 74 % of the persons saying that they have recognized it clearly or even intensively. Although the information text on the label is reduced to a minimum the test persons did not read it very carefully. This result underlines the importance that the label and the package of the different flavour groups is consequently in the layout of different colours; thus that the consumer is guided by text and colours. In question 10 (data not shown) people 49 % of the people said that they can remember that different varieties were went along with different colours of the labels. About half of these persons could correctly say that these colours indicate the flavour direction. The other half couldn't say it clearly or correctly, respectively.

Table 1. Some of the questions asked to the test persons (n = 120) and their answers (%).

Question				
Did you recognize the seen information system ever before?	**No** **32**	**Yes** **68**	**-**	**-**
How much did you recognize it today?	**Not at all** **4**	**A little bit** **23**	**Yes, clearly** **42**	**Intensively** **32**
How completely did you read this information?	**A little bit** **28**	**Almost not** **13**	**Most of it** **31**	**All of it** **28**

Question 6 was "How important is this information for you for the buying decision in the shop?". With 36 % of the interviewed persons answering "important and even 40 % saying "very important" (Fig. 1) a substantial prove could be found, that additional information on flavour is important for apple buyers. Question 7 was " How good were the information on the different varieties to make a buying decision?". In a possible range of 1 meaning "very bad" to 7 meaning "very good" 88 % of the test person answered in the range of 5 to 7 (Fig. 2). Meaning that the information given is very much satisfying the shoppers' expectations. Question 8 was "Which information at the test shelf did you like most?" There 77 % of the persons appreciated the overall presentation of the apples. On first place with concrete food information there was the indication of flavour direction with 59 % answer frequency. The indication of the variety name was appreciated to a lesser extent with 33 % frequency. Other information as origin, good layout etc. reached less than 20 % score (Fig. 3). An additional question addressed suggestions of improvements. There 38 % score was achieved by indication of price – obviously because it was by mistake not indicated in the test shelf. No other possible parameter was significantly mentioned (data not shown), indicating that the information concept is quite satisfactory at present status.

Fig. 1: Frequency of answers (%) on question 6: «How important is this information for you for the buying decision in the shop?»

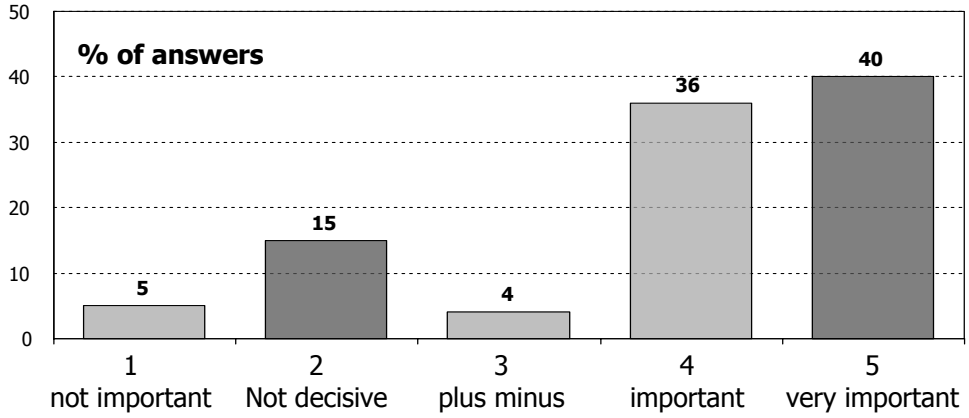


Fig. 2: Frequency of answers (%) on the question 7: «How good were the information on the different varieties to make a buying decision?»

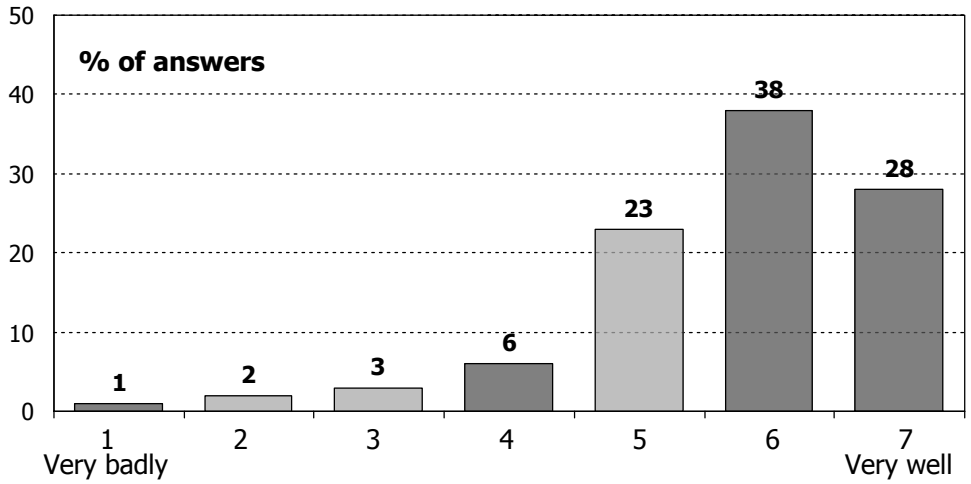
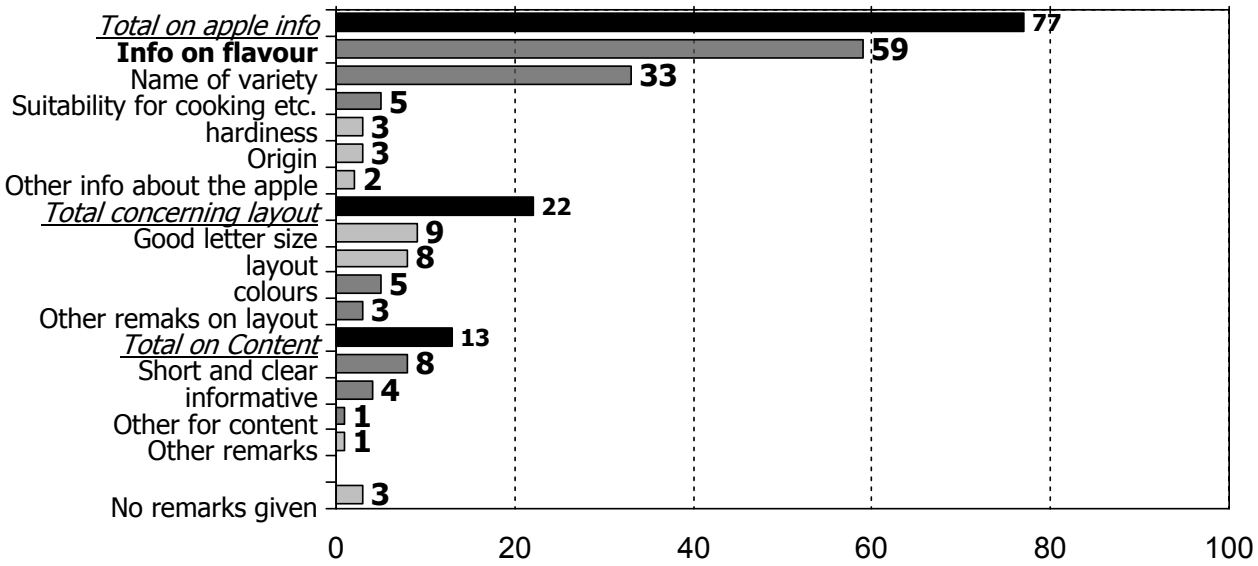


Fig. 3: Frequency of answers (%) on question 10: «What on the information given did you appreciate most?»



Conclusions

The presented study is an additional solid prove that the Flavour Group Concept (FGC) is a valid instrument to ease the introduction of "unknown" apple varieties, namely scab resistant ones in supermarkets. Currently when ordering organic apples, many of the Coop retail buyers order by flavour group rather than specific varieties. This behaviour change is very advantageous for organic growers or intermediate retailers because now, as long the quality is o.k., it doesn't matter if they

can deliver a only little-known variety or have only small quantities available. As a combined effect, the FGC is offering more and flexible possibilities to produce and retail "unknown" varieties. For a credible and highly ecological-oriented organic apple production disease tolerant varieties – new or old ones – should and now can be preferred.

Variety Teams

Although the FGC offers desirable degrees of freedom to produce and sell an ecological-oriented and high diversity of apple varieties, both, organic growers and retailers must and want avoid a too high diversity and exclude varieties of only moderate quality or overlap with similar varieties. Thus, on top of the FGC a tool is necessary to optimise the organic apple variety assortment.

Our answer to this challenge is the creation of "Variety-Teams". The goal of the Variety Team is to create an organic apple cultivar *assortment* that is highly attractive over the whole selling period, in particular in terms of:

(i) full coverage of the 3 flavour groups,
(ii) credible ecological production and
(iii) high internal quality

The Variety Team is a consortium with representatives of Coop, intermediate retailers, growers and FiBL fruit experts. On basis of agronomic testing results in the trials of FiBL and sensory panels, the whole Team makes a decision which variety will be promoted by the Variety-Team program. Then the 3-4 growers of the Team are planting these trees for a so-called "Starting Production" in the magnitude of 1 ha in total. With the fruit produced there in the 3rd and 4th year, Coop will carry out and evaluate so called "Test Selling". According to the results the Variety Team will decide on "Stop or Go" with this particular variety. Detailed contracts between all partners share the different economic loads and risks between the partners: basically the growers get a so-called "Pioneer-Bonus-Price" for the fruit delivered for the Test Selling. In the case, where the Variety team would decide to stop with that variety, this bonus more or less covers the growers' investment costs. Coop on the other hand, is investing the money for the bonus-price and carries extra costs for the organization and evaluation of the Test Selling. FiBL fruit experts are co-ordinating the Variety Team.

The Variety Team idea was created in December 2002 and accepted as a project in February 2003. To start with, 3000 trees of variety "Ecolette" – suited to fulfil the now existing gap in the flavour group of predominantly tart apples - are ordered and will be planted in autumn 2004.

References

Weibel, F.P., and F. Grab. 2000. Sustainable production needs sustainable marketing: Evaluation of a new marketing concept to introduce organically grown scab (*Venturia inaequalis*) resistant apple varieties at the Swiss supermarket retailer Coop, p. 255-258, *In* Thomas Alföldi, et al., eds. Proceedings of the 13th Int. IFOAM Scientific Conference. FiBL, Basel.