



A Pilot
Market Test
of
Instant
Kona Coffee

89¢

Harold R. Linstrom, Joseph T. Keeler & C. Richard Creek

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BACKGROUND

The overproduction of coffee and low prices on a world-wide basis have caused the present depressed economic situation facing Hawaii's Kona coffee industry. As long as Kona coffee is sold as green through the present market channels as is most of the world's supply of coffee, the price of Kona coffee will fluctuate with the world coffee price. This is true despite the fact that mild coffees such as Kona have a distinctive flavor and command a higher price than other coffees.

Hawaiian coffee comes almost exclusively from the Kona district of the island of Hawaii; hence, the trade name "Kona" coffee. More than 75 percent of the crop is sold through West Coast brokers to mainland roasters. Mainland roasters use Kona coffee as a flavoring constituent in their blends along with other mild coffees such as Colombian. Only recently have mainland roasters packaged a pure or "straight" Kona coffee for sale on the mainland.

Another market for Kona coffee, which has been in existence for many years, is the local Honolulu roaster who roasts and packages only pure Kona coffee. Present state laws prohibit the import of green or parchment coffee into Hawaii. While the local roaster accounts for a relatively small percentage of the market for Kona coffee, there is evidence that this market may increase in the future. Most of the locally roasted coffee is sold in Honolulu, although some is sold as gift packages and mailed to the mainland.

A small amount of relatively high quality Kona coffee is exported to Europe and the Far East. On various occasions the European market was thought to hold great promise for increasing the sales of Kona coffee; however, most efforts in this direction have not been successful. Kona coffee is presently marketed in Europe, but only sporadically and in small amounts. The quality of the Kona crop varies somewhat from year to year due to climatic factors and this makes it difficult for the industry to consistently supply the high quality coffee demanded by European roasters.

The major marketing problem now confronting Hawaii's coffee industry is obtaining a higher price for Kona coffee. The relatively small size of the total Hawaiian crop does not create the quantity or surplus problem that exists in countries with large production. There is rarely a hold-over of Kona coffee from the previous crop year and when there is, it is due to millers' anticipation of higher future price rather than to lack of a market.

The characteristics of small total volume, high quality, and distinctive flavor indicate that Kona coffee might well be marketed as a specialty product. Honolulu roasters have been marketing some of their ground roasted coffee in what might be termed the "gourmet" market. Also, the rapid growth in the sales of instant coffee in recent years indicates that there may be a future for a Kona soluble coffee. During the years when instant coffees were gaining a foothold in the market, the sales emphasis centered primarily on stressing that instant was more convenient and avoided waste. Roasters used up to 50 percent of the cheaper African robusta coffees in their instant blends. Their reasoning was partially predicated on the fact that the aromas of the better coffees would not come through in the final product. Recently, however, technology in the manufacture of soluble coffee has improved to a point where it is possible to salvage the delicate flavors and aromas found in better coffees. These developments may lead to the successful marketing of high quality and gourmet instants. Kona coffee in the ground form seems to fit this market well; there also may be a good sales potential for a high quality Kona instant.

OBJECTIVES OF THE STUDY

The primary aim of this study was to obtain information regarding the market potential and consumer acceptance of instant Kona coffee. The answers to two questions were being sought by the market test here reported:

1. Is there a potential for instant Kona coffee in the Honolulu retail market?
2. If such potential exists, is 100 percent premium quality Kona coffee necessary to satisfy this market?

MARKET TEST PROCEDURES

Although Hawaii Kona coffee, in ground form, has long been available to the people of the Islands, and to many on the mainland, a soluble, or "instant" form had never been offered to the coffee-drinking public until June, 1962. At that time, two types of instant Kona coffee were placed on the shelves of five supermarkets on the island of Oahu. This began a 19-day market test to compare the sales of a premium and a less-than-premium quality instant Kona coffee.

The test products were prepared on the mainland where the spray-dry process was utilized in bringing them to a soluble state. They were packed in 6-ounce jars. The jars carrying a brown label contained coffee made from 100 percent high quality, green, peaberry beans. The coffee packed in an orange-labelled container was made from 75 percent high quality and 25 percent lower quality peaberry beans. The test products--both brown and orange label--were priced at 89 cents per 6-ounce jar, which was generally comparable with the price of other instant coffees.

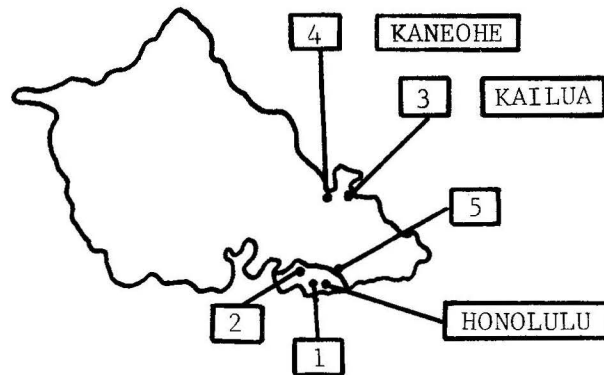


Figure 1. Location of test stores, island of Oahu.

The market test began on June 30 and ended on July 18, 1962. The test period of 18 days included three Sundays and excluded July 4th.

The instant Kona coffee was promoted in newspaper grocery ads on three consecutive Thursdays during the test period. Other newspaper publicity, as well as television and radio advertising, accompanied the introduction of the new form of Kona coffee. (See Figure 2.)

A standard market test method was used to measure product movement during the test period. Weekly delivery records were provided by the retailers' central warehouse. On Monday mornings, inventories determined the total jars of the product in each store. Weekly deliveries, plus first-of-week inventories were added together. Then, end-of-week inventories were subtracted to arrive at the number of jars sold during the week.

A 1-page, 12-item questionnaire was attached to each jar of instant Kona coffee. (See Appendix Table 2.) Purchasers were requested to complete the questionnaire after they had tried the coffee and to return the completed schedule to the store where they had made their purchase. These questionnaires asked such things as the buyer's reasons for purchasing instant Kona, what she thought of the product's flavor and aroma, why she did or did not like the product, and whether or not she intended to buy it again.

MARKET TEST RESULTS

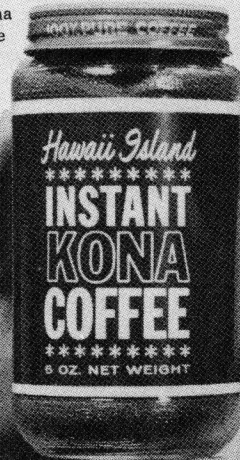
During the 19-day test period (18 days excluding July 4), 1,260 jars of instant Kona coffee were sold. Of this number, 636 were orange-labelled and 624 were brown-labelled jars. In certain of the retail outlets instant Kona was sold out in 1 week, while in other stores the entire test period was required to move a much smaller amount of the product.

This Hawaii Island **INSTANT KONA COFFEE**

was produced from 100% pure premium Kona Coffee. It was made because the Kona Coffee Industry wants to learn just how good an instant Kona Coffee can be. So far, the people who have tried Instant Kona say they like it. Many say it's as good a coffee as any on the market, and of course, no other coffee has that distinctive, rich Kona flavor and aroma. Only a few hundred cases of this trial run are left, and it will be several months at best before there will be any more. See how you like Instant Kona. Try a jar today.

You'll find 6 oz. jars of Instant Kona Coffee at these Honolulu super markets, who are giving Kōkua to the Kona Coffee Industry.

Chun Hoon and Everybody's Super Market
All Star and Western Star Super Markets
All Times Super Markets



Hawaii Island Instant Kona Coffee is
grown and distributed by the
KONA COFFEE ASSOCIATION

Figure 2. Newspaper advertisement which accompanied introduction of new instant Kona coffee.

Data were not available on the sales of competing coffees, either instant or ground. However, officials of the supermarket chain which cooperated in the study were of the opinion that the instant Kona coffee sold during the test period was a definite plus for their retail outlets. Since most purchasers were regular users of instant coffee, it appears that the new instant product was bought in addition to, rather than as a replacement for, their usual brand of soluble coffee. As will be seen during analysis of the consumer opinion phase of the study, these sales may have resulted from curiosity, loyalty to products of Hawaii, and the promotional campaign which accompanied the introduction of instant Kona coffee. There was some evidence of potential repeat sales for the new product; however, due to the short-term nature of the market test, no conclusive measure of repeat purchases was obtained.

Although 1,260 jars of instant coffee were sold, only 412 usable questionnaires were returned to the supermarkets. Responses from those 412 buyers indicated that the majority purchased only one jar, either the brown or orange label, of instant Kona. (See Appendix Table 1.) Slightly over 10 percent of the buyers reported that they had purchased both the brown- and orange-labelled products. Some 40 percent of the reasons given for purchasing instant Kona involved curiosity--"wanted to try a new product," "wanted to compare it with others." About one-fourth of the reasons for purchasing reflected loyalty to Hawaii--"to help Hawaii," "to help a local industry."

Most purchasers were regular users of instant coffee and they felt that the instant Kona coffee had a pleasant aroma and a flavor that was good to excellent. They summed up their feelings with an overall judgment of the product, and more than 8 buyers in 10 said they liked instant Kona for such reasons as, "It tasted like brewed coffee," "Better than (or just as good as) other instant coffee," "Tasted like Kona coffee." An equal proportion of respondents--8 in 10--reported that they intended to buy another jar of this instant Kona coffee. The major criticism of instant Kona coffee, from among a small number of negative comments, was that it was "too weak" or "too mild." No outstanding differences of opinion existed between those who had purchased the orange-labelled coffee and those who had purchased the brown-labelled product.

ECONOMIC CONSIDERATIONS INVOLVED IN PRODUCING INSTANT KONA COFFEE

There are several alternatives to selling green Kona coffee to mainland roasters for blending. These include the production of a gourmet, ground roasted coffee, and the sale of selected green Kona coffee to specialty markets in Europe. Such alternatives are directed at creating a demand for Kona coffee as a product distinct from other coffees. It is very unlikely that any method of marketing Kona coffee will completely divorce it from the world market demand conditions for all coffees, but achieving even a moderate amount of distinction for the local product could substantially increase the returns to the industry.

Another alternative to marketing Kona coffee in the present manner is to convert it into a soluble or instant coffee. It is quite possible that a pure Kona soluble coffee could be sold at a price above that received for other soluble coffees. Such a product would be unique in that all other soluble coffees, with few exceptions, are blends of many coffees and contain cheaper grades. Further, the name "Kona" with the romantic image it creates in the minds of many consumers might well qualify it for the gourmet or specialty market.

The economic bases upon which the potential success of producing a Kona instant is dependent are many and some of them are touched upon only briefly here. However, it is important to keep in mind some of these economic determinants in considering the conclusions reached in this publication. One economic condition is that Kona soluble will of necessity have to command a higher price than most of the solubles presently being sold. Most solubles being marketed today contain African robusta and Santos coffees which are cheaper than even the lower grades of Kona coffee. Secondly, a Kona soluble would most likely have to be produced by a mainland manufacturer under a private label contract, thus it would be higher in cost than the manufacturer's own brand. In brief, the economic potential for selling Kona coffee in the soluble form is dependent on marketing a high quality distinctive coffee at a premium price. This does not imply, however, that only the highest grades of Kona coffee would be used in making soluble coffee.

While the costs of producing the soluble for this test are valuable in depicting the problems associated with producing a Kona instant, they are not typical of anticipated costs were this operation to be instituted on a commercial basis. At the time this study was conducted, no facilities were available in Hawaii for processing green coffee beans into soluble coffee. Green coffee was, therefore, shipped to the East Coast mainland for roasting, extracting, and drying. Packaging was later completed on the West Coast just prior to shipment to Hawaii. On a commercial scale, it is quite conceivable that all of the processing and packaging could be carried out on the West Coast, thus reducing the mainland shipping costs. The costs involved in such processing will have to be taken into consideration by any firm contemplating the marketing of instant Kona in Honolulu. One cost factor easily omitted, of course, is return shipment of processed coffee from the mainland to Honolulu. It may be well to consider the profit potential of marketing instant Kona on the mainland as well as (or instead of) in Honolulu. Another possibility would be to install in Hawaii the equipment necessary for processing green coffee to the soluble form, thus eliminating the major transportation costs currently involved. However, the volume of coffee available for instant coffee manufacture might be too small to achieve the full economy of a large-scale operation.

The latter course of action is being investigated by the Kona coffee industry. Such equipment investment, however, would represent a major fixed cost. Much more information regarding the long-term market potential for instant Kona coffee would be required before such investment could be made with some assurance that it would be a profitable undertaking.

The following table shows the estimated cost breakdown for a 6-ounce jar of instant Kona coffee were it produced on a commercial scale. The costs of the green Kona coffee, processing, shipping, ocean freight, and trucking are based on the 1962 market test. The retail margin was based on the findings of the Dillon Study which shows that gross margin on instant coffee sales was 12 percent.^{1/} The cost of packaging and labelling (cost of jar, label, lid, case, and filling case) was based on estimates by the National Coffee Association of average costs currently incurred by manufacturers of instant coffee.

Estimated cost breakdown for 6-ounce jar of instant Kona coffee

Cost of green Kona coffee @ 33¢/lb.	39¢
(green to soluble coffee conversion ratio, about 3.2:1)	
Processing	
Convert to soluble	15¢
Roasting	1¢
Packaging and labelling	6¢
Ocean freight and trucking	10¢
Retail margin	<u>11¢</u>
Total ^{2/}	82¢

It must be remembered that the above total per-jar cost of 82 cents does not include broker's fee and other selling costs or the cost of filling the jars. These costs are quite variable between firms. However, it is apparent that the cost of producing instant Kona would be higher than for other instant coffees.

CONCLUSIONS

Over the 3-week test period there was no significant difference between sales of the premium quality and the less-than-premium quality instant Kona coffee. It appears that the quality differential involved in this test was not great enough to either encourage or discourage sales of one or the other type of instant Kona. Many of those who purchased instant Kona--whether out of curiosity, loyalty to products of Hawaii, or for whatever reason--were satisfied with the product, and the majority of purchasers who returned questionnaires stated that they would buy it again, thus indicating a potential for repeat purchases.

This market test indicates that consumers who tried the product liked it and would purchase it again. Before a conclusive statement with regards to the market potential for instant Kona coffee in Honolulu can be made, more intensive testing will be required over a longer period of time.

^{1/} The Dillon Study is a research report published by Progressive Grocer in 1960. It covers the operation of five supermarkets of the Dillon chain. Headquarters are in Hutchinson, Kansas; retail operations are carried out in Kansas and Colorado.

^{2/} Does not include cost of filling jars, broker's fee, and other selling costs.

APPENDIX TABLE 1

Summary of Replies in Consumer Survey

Responses	Buyers of orange label		Buyers of brown label	
	Number	Percent	Number	Percent
First purchase of (orange or brown) label	202	94	189	96
Repeat purchase of (orange or brown) label	13	6	8	4
Number of respondents	215	100	197	100

Have purchased "other" label	30	14	20	10
Have not purchased "other" label	183	85	174	88
No reply	2	1	3	2
Number of respondents	215	100	197	100

Reasons for purchase:				
Try new product, compare with others, curiosity	115	45	103	41
To help Hawaii, to help Kona, to help local industry	63	25	67	27
Like Kona coffee	52	20	52	21
Saw publicity, advertising, recommended by friends	27	10	27	11
Number of reasons	257	100	249	100

FLAVOR was: excellent	91	42	88	45
good	92	43	72	37
fair	19	9	22	11
poor	8	4	14	7
No reply	5	2	1	*
Number of respondents	215	100	197	100

AROMA was: pleasant	141	66	122	62
OK	62	29	59	39
unpleasant	3	1	4	2
No reply	9	4	12	6
Number of respondents	215	100	197	100

TASTE was: mild	84	39	79	40
strong but pleasant	114	53	101	51
harsh	-	-	-	-
bitter	12	6	11	6
No reply	5	2	6	3
Number of respondents	215	100	197	100

*Less than 1 percent.

(Continued)

Appendix Table 1. (Continued)

Responses	Buyers of orange label		Buyers of brown label	
	Number	Percent	Number	Percent
Liked instant Kona coffee	191	89	162	82
Did not like instant Kona coffee	22	10	31	16
No reply	2	1	4	2
Number of respondents	215	100	197	100

Reasons for liking:				
Tasted like brewed coffee, like good coffee, better than other instant coffees	67	40	53	37
Tasted like Kona coffee	20	12	18	12
Just as good as other instant coffee	54	32	49	34
Because I like products of Hawaii, want to help a local industry	12	7	2	1
Good taste, flavor	6	4	6	4
Convenient, time saving, quick and easy to prepare	5	3	5	4
Price, economical, low cost	1	*	5	4
Miscellaneous	3	2	6	4
Number of reasons	168	100	144	100

Reasons for <u>not</u> liking:				
Too weak, too mild, flat, no flavor	14	61	21	58
Flavor was strong, harsh, bitter, sour	5	22	5	14
Lacks Kona flavor	3	13	7	20
Miscellaneous	1	4	3	8
Number of reasons	23	100	36	100

Plan to buy another jar of this instant Kona coffee	181	84	153	78
Do not plan to buy another jar of this instant Kona coffee	29	14	36	18
No reply	5	2	8	4
Number of respondents	215	100	197	100

Usually buy:				
Instant coffee	109	51	94	48
Ground coffee	11	5	15	8
Both types	92	43	85	43
No reply	3	1	3	1
Number of respondents	215	100	197	100

*Less than 1 percent.

(Continued)

Appendix Table 1. (Continued)

Responses	Buyers of orange label		Buyers of brown label	
	Number	Percent	Number	Percent
Reasons for intention to buy:				
Better than, or as good as, other instant coffees	72	40	66	42
To help Hawaii, help Kona, buy a local product	50	28	43	28
Like it, family likes it	17	10	17	11
Want to try "other" label, to compare	9	5	10	6
Good price, low price, economical	13	7	8	5
Convenience, ease of preparation	2	1	5	3
For gifts, send to mainland	4	2	2	1
Qualified answers (will buy "if price is right," if "taste and aroma improve," etc.)	3	2	4	3
Miscellaneous	9	5	2	1
Number of reasons	179	100	157	100
Reasons for intention <u>not</u> to buy:				
Too weak, too mild, no flavor	15	50	19	50
Dislike it, prefer other coffee	5	17	5	13
Lacks Kona flavor	3	10	7	18
Cost, too expensive	2	7	1	3
Want to try "other" label	1	3	2	5
Miscellaneous	4	13	4	11
Number of reasons	30	100	38	100

APPENDIX TABLE 2

Questionnaire Used In Survey

Just Write in Your Answers
Then Bring This Completed Survey Form
to your TIMES SUPERMARKET

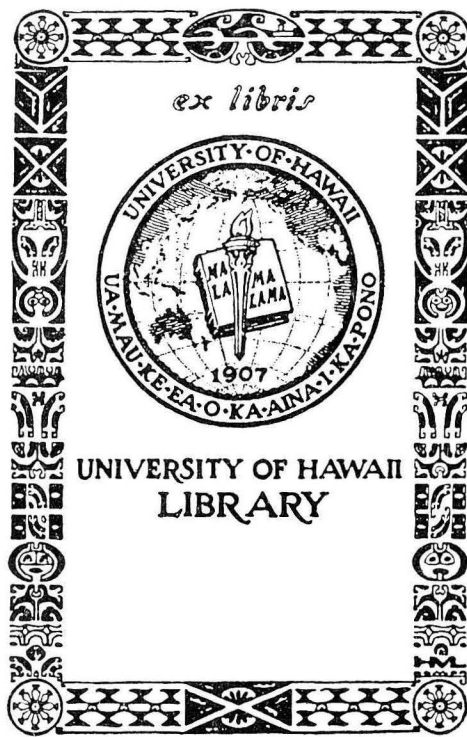
The HAWAII ISLAND INSTANT KONA coffee you have bought is a NEW product which was made for your satisfaction and convenience. Your answers--with a check and your opinions--will help the Kona Coffee industry.

1. "The INSTANT KONA coffee that I bought had a brown , orange label."
 2. "This was the first , second time that I bought this color label."
 3. "I have , have not bought a jar of the other color label."
 4. "I bought this jar of HAWAII ISLAND INSTANT KONA coffee because _____."
_____."
 5. "The flavor of this HAWAII ISLAND INSTANT KONA coffee was:
Excellent , good , fair , poor .
 6. "The aroma was pleasant , OK , unpleasant .
 7. "The taste was mild , strong but pleasant , harsh , bitter .
 8. "Of all the persons who tasted my HAWAII ISLAND INSTANT KONA coffee this number:
_____ liked it, _____ did not like it, _____ didn't express any opinion."
 9. "I used a level , rounded , heaping teaspoon for each cup."
 10. "I liked , didn't like this INSTANT KONA coffee. Why? _____."
_____."
 11. "I plan to buy , do not plan to buy another jar of this INSTANT KONA.
Why? _____."
 12. "I usually buy instant , ground , both types of coffee."
- Name _____ Phone number _____
Address _____

MAHALO FOR YOUR KOKUA

Kona Coffee Association, Kailua-Kona, Hawaii

PLEASE RETURN YOUR ANSWERS NEXT WEEK



UNIVERSITY OF HAWAII
COLLEGE OF TROPICAL AGRICULTURE
HAWAII AGRICULTURAL EXPERIMENT STATION
HONOLULU, HAWAII

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