



A Consumers' valuation of Frital INTA: An empirical Research that applies the experimental Auction Method

Introduction. Potatoes are an essential part of the Argentine diet. But little, if nothing, is known about optimum potato quality by the average consumer. A recent study on this topic (Rodríguez *et al.* 2015) has shown that very little is known about the wide variety of potatoes and a complete misunderstanding about the cooking benefits of other potato varieties.

Bearing this in mind, a number of questions arise regarding our research: **Would consumers in general, be willing to pay higher prices for a fresh potato variety posing less agrochemical content? How would the price of this alternative variety fluctuate if consumers are properly informed with respect to production processes, culinary traits and the environmental impact? Does how the product is packaged cause a visual impact on the general consumer and, therefore, change his bid? .**

Objective The aim of this research is to study how consumer valuates a differentiated potato, while possessing information about its culinary traits, low agrochemical content and new packaging presentation into the domestic market.

Materials and Methods

Data Source

Experimental Auctions (EA) have been put into practice to investigate consumer acceptance and willingness in paying for new or better quality products (Lusk and Shogren, 2004). EA permits researchers to evaluate consumers' acceptance towards a new variety of potato, along with the possibility of measuring the impact of different sources of information, regarding product and packaging. The EA was carried out in April 2017. A representative sample of Faculty of Economics and Social Sciences population, students and staff were selected by gender and age. At the end of each session, participants completed a detailed questionnaire that covered general household questions and demographic and socio-economic data .

Data analysis

- ❖ Summary Statistics
- ❖ Kruskal-Wallis Test
- ➔ Levene Test

Second-Price Auction -Vickrey, 1961-

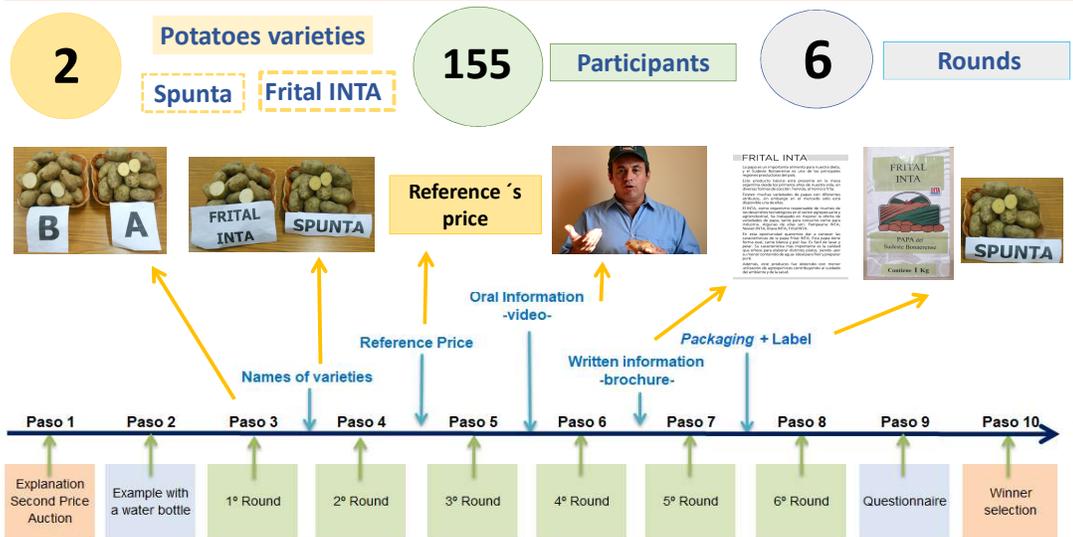


Figure 1: Steps of Experimental Auction.

Source: Authors' s elaboration.

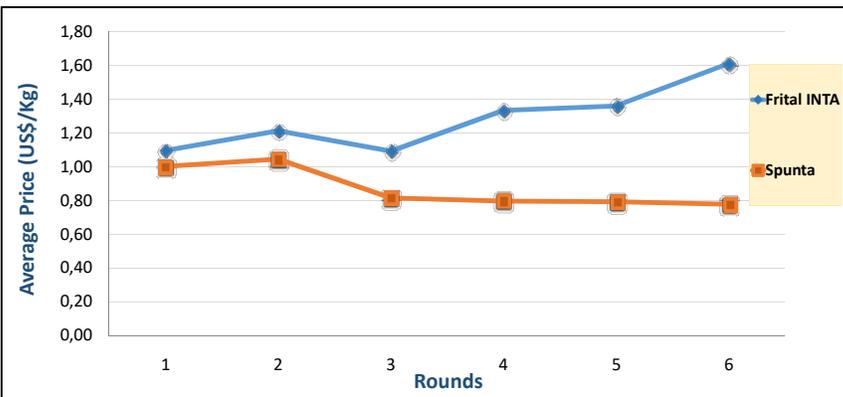


Figure 1: Bidding evolutions in subsequent EA Rounds – Average Prices
 Source: Author's calculation (Experimental Auction Results – April 2017).

Results

The Kruskal-Wallis Test showed that significant differences were found between the 9 groups, when comparing the bidding prices on the Frital INTA and Spunta varieties, particularly in Round 4, in which expert information was offered orally (p value = 0.0025). It has to be stated that previously, the Levene Test was applied in order to test the homogeneity of variances (p value = 0.101). Although the final results arise from an exploratory study, they do offer information about consumer's valuation. This valuation is about a potato variety bearing good culinary traits, obtained with low agro-chemical content and presented in a packaging permitting identification in the retail domestic market. The average price that consumers would pay for Frital INTA with a greater added value (US\$ 1.60) may be useful when comparing to production costs. The preliminary results obtained not only show a consumer concern about culinary traits and low agro-chemical content, but also an interest in packaging and tagging. This must be kept in mind where retail market distribution is concerned.

Acknowledgements. The authors acknowledge the collaboration of Potato Research Group (EEA-INTA Balcarce, Argentina).

References

- Lehmann, E. L. & D'abrera, H. J. M. (1975) "Nonparametrics. Statistical Methods based Ranks". Holden-Day Inc., California.
- Lusk JL, Shogren JF (2004) Experimental Auctions. Methods and Applications in Economic and Marketing Research. Cambridge Univ. Press.
- Rodriguez, EMM; Lupin, B; Gonzalez, J. (2015) Willingness to pay for a differentiated potato applying a choice modelling experiment by socioeconomic levels of Argentinean consumers. International Conference of Agricultural Economists, 29, Milan, 8-14 august 2015.
- Vickrey W .1961. Counter speculation, auctions, and competitive sealed tenders. Journal of Finance, 16:8-37.

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