Title
Research of Georgian Wines Quality: Statistics and Sensory Evaluation Results

I want to submit an abstract for:
Conference Presentation

Corresponding Author
Mariam Khomasuridze

E-Mail Corresponding Author
m.khomasuridze@gtu.ge

Affiliation

Co-Author/s

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<th>Name</th>
<th>Affiliation</th>
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<tr>
<td>Sopio Tamazashvili</td>
<td>Director of Georgian Wine Guild LTD. D 9 April street Tbilisi 0108.</td>
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E-Mail/s Co-Author/s

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<td><a href="mailto:georgianwineguild@gmail.com">georgianwineguild@gmail.com</a></td>
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Keywords
Keywords. Georgian Wine, Sensory Evaluation, Wine Export, Wine History.

Research Question
The experiment aimed to research Sensory parameters and chemical composition of Georgian wines

Methods
In Frame of study were conducted tasting sessions and Laboratory analyses

Results
5100 wines were tasted and in 4180 were determined the chemical parameters

Abstract
The ancestors of modern Georgians had been creating the art of grape cultivation and winemaking, since the Neolithic Period, throughout Bronze, Iron, Antiquity, Post-Christendom Periods, Medieval and Modern era. Unique and traditional winemaking technologies are passed down from generation to generation (Rusihvili N., 2010). The archaeological discoveries, historical facts and literary sources confirm that the history of Georgian viticulture
and enology dates back eight thousand years. There are numerous exhibits associated with winemaking preserved at Georgian museums dating back to millennia. The clay vessel from early geoponic Shulaveri - Shomu culture, deserves particular attention as it is considered to be the oldest wine vessel in the world, dating back to VI-V millennium BC). The genetic love and respect of vine is reflected in Georgian myths, folklore, art, and religious beliefs (Mirvelashvili M., Maghradze D. 2015).

In Georgian viticulture regions, almost every family makes wine, during the last 10-15 years, a lot of cellars were restored and the new small scale wineries were established. The rich history of vitiviniculture obliges the local entrepreneurs to maintain traditions, endemic vine varieties and to produce the high quality wines. Along with governmental structure, private sector should play an important role in maintenance of Georgian wine quality. Georgian Wine Guild Ltd, has researched the quality of wines, produced in industrial and family wineries. The study was carried out within of a non-commercial project "Top Georgian Wines", implemented for supporting of local entrepreneurs. The aim of the research was to assess the quality of Georgian wine, identify the needs of wine entrepreneurs and develop an essential services.

In frame of the project, 466 winemakers, on their own initiative, submitted 5100 wines for sensory evaluation. The wine tastings were carried out in accordance with international standards, in full compliance of ethical norms. Tasting commissions were staffed by certified tasters, with rich experience and proper qualification. The sensory evaluation sessions were planned and fulfilled by consideration of following document ,,Resolution OIV/ Concourse 332/2009; OIV Standard for International Wine and spirituous beverages of Vitivinicultural Origin". The wine was rated by 100-point scale system, and based on results, classified by following awarding categories: Grand Gold - at least 92 points; Gold - at least 85 points; Silver - at least 82 points; Bronze - at least 80 points.

In addition, in order to promote quality of Georgian wine and provide information about Georgian wine producers to the world population, the non commercial website www.topgeorgian.wine was designed. It was not created for the sale of wines. At the request of producers, the wines, rated more than 80 points, are presented on the website. Based on the obtained results, 70.78% of the total number of tested wines are evaluated with the points corresponding to different categories of medals. 19.01% of tested wines scores correspond to the grand gold medals, 28.23% - to the gold medal, 15.09% - to silver medal, 10.39% to the bronze medal. Out of 5100 wines, 640 wine tasting sheets indicate different wine faults. The most common microbiological faults were caused by sulfur containing compounds and oxidation.

17% (850 bottles) of the wines were rated with less than 80 points. In the tasting sheets of these wines, panelists have mentioned following comments: lack of harmony; low acidity; grippy tannins; too astringent / bitter mouthfeel; absence of primary aroma; flat taste; pyrazines; herbaceous tones. Based on the analysis of data from 2019-2022, it was determined that the percentage of wines with a rating of less than 80 points decreases every year, which indicates the development of quality of Georgian wine.

As part of the study, 412 wineries presented the results of the laboratory analysis of 4180 wines on their own initiative. The analyses were performed in accredited laboratories of Georgia. The chemical parameters of the wines were compared with the requirements, set by the wine certification procedure, local and international regulatory documents of the field. The results confirmed, that 3940 wines (94%) chemical parameters meet the established requirements.

Georgian Wine Guild’s activities acted as a kind of motivation for winemakers to present their own wine in prestigious international competitions. The evaluation results of Georgian Wine Guild tastings commissions were almost identical to the scores, received in international competitions. The wines assessed in this project were participated in ,,MundusVini” and ,,International Wine Challenge” and awarded by gold and silver medals. Wine is a strategic export product for Georgia. The quality of the wine depends on the income of its entrepreneurs. Therefore, upon research team request, Georgian Wine Agency has provided the information about wine export. Georgian wine is exported to many countries around the world. In order to find new markets, private sector, along with governmental structures, permanently planes the special events and tastings throughout the year, which are led by famous wine masters, wine writers and connoisseurs.

For the development of wine business, which results the economic success of the country, is urgently necessary the monitoring of Georgian wines quality. For reliability of results, wine producers, private sector representatives need to be involved in assessment process. The research conducted by the Georgian Wine Guild and results presented on this paper are one of the successful examples of this practice.

References
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Research of Georgian Wines Quality: Statistics and Sensory Evaluation Results

S. Tamazashvili a, M. Chkoidze a, N. Tektumanishvili a, M. Khomasuridze b

a. Georgian Wine Guild LTD. D 9 April street Tbilisi 0108. Email: georgianwineguild@gmail.com
b. Georgian Technical University. Professor. Faculty Agricultural sciences and Bio Systems engineering. 17 D. Guramishvili street. Tbilisi 0194. Email: m.khomasuridze@gtu.ge

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In frame of the project, 466 winemakers, on their own initiative, submitted 5100 wines for sensory evaluation, the amount of separate categories is shown in Diag. 1.

![Diagram 1: Categories of Tasted Wines](image)

The wine tastings were carried out in accordance with international standards, in full compliance of ethical norms. The results of sensory evaluation are presented on diag. 2. Tasting commissions were staffed by certified tasters, with rich experience and proper qualification. The sensory evaluation sessions were planned and fulfilled by consideration of following document „Resolution OIV/Concourse 332/2009; OIV Standard for International Wine and spirituous beverages of Vitivinicultural Origin”. The wine was rated by 100-point scale system, and based on results, classified by following awarding categories: Grand Gold - at least 92 points; Gold - at least 85 points; Silver - at least 82 points; Bronze - at least 80 points.

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