UDC 664.6/.7:663.2:634.8
DOI https://doi.org/10.32782/2663-5941/2026.1.1/40

Kovach O.I.
https://orcid.org/0009-0005-2099-0827
Odesa National University of Technology

WORLD PRODUCTION OF PETILLANT NATUREL SPARKLING WINES, TECHNOLOGIES AND TRENDS

Pét-Nat (Petillant Naturel) is the oldest type of sparkling wine from France, which is produced by the Ancestral method, and precedes the appearance of champagne. Currently, these wines are becoming the most popular trend in the winemaking industry, attracting attention for their naturalness, authenticity and lack of complex technological processes. Purpose: to analyze the state and prospects of the world production of sparkling wines of the Pét-Nat type, to characterize innovations in the technology of their production. The methodological basis was a meta-analysis, which involved searching for scientific articles on the relevant topic, a comparative and descriptive analysis of world production and a generalization of the results of various studies on technologies and trends in the production of sparkling wines of the Pét-Nat type. The EU remains the main producer of Pét-Nat, accounting for 70-80% of world production, with Italy and France leading the way, so since 2020, imports of Pét-Nat to the EU have been decreasing and remained at a stable low level until 2024. The disadvantages of the Ancestrale method are the difficulty of controlling the fermentation process and ensuring full stability and reliability, and the «capriciousness» of the technology. The advantages include that it is relatively inexpensive, simple, flexible, as it can be used in home winemaking and industrial conditions, but at the same time it has many risks and is difficult to control. This confirms the relevance of developing a methodology for producing Pét-Nat wines and finding ways to improve control of the technological process. The decisive factors for ensuring the stability of the production process and obtaining high-quality and authentic Pét-Nat wine are the chemical composition of the must, fermentation management and a clear bottling protocol. Grape varieties such as Riesling, Albarino and Pinot Noir, and among the hybrid varieties – Catawba, Diamond and Marquette are traditionally used in the Pét-Nat wine technology. The key differences between Pét-Nat wine and traditional sparkling wines that determine the quality of these wines are higher acidity, low carbon dioxide content, a wide palette of taste and aromatic characteristics towards the predominance of fruit, tropical and floral aromas, the content of residual sugar, which is influenced by specific features of the production process (for example, the absence of secondary fermentation under pressure, aging on the lees, the absence of disgorging). Pét-Nat has the potential to meet the needs of consumers who value naturalness, minimal intervention in the technological process and authentic taste, which creates significant opportunities for the further development of this category of wines in Ukraine and the world.

Keywords: *sparkling wine, winemaking, petillant naturel, wine technology, production, winemaking trends.*

Formulation of the problem. Sparkling wine of the type Pét-Nat (Petillant Naturel), from the French «*naturally sparkling*» has become one of the most popular trends in the modern world of winemaking. This type of wine attracts attention with its naturalness and natural taste, the absence of complex technological processes, authenticity and the absence of food additives in the recipe.

Pét-Nat is considered the oldest form of sparkling wine production in France, which precedes the appearance of champagne. One of the hypotheses of the emergence of Pét-Nat wines suggests that wines in the naturally cool regions of France underwent primary fermentation before the onset of winter, when the decrease in temperature naturally stopped the process. Not knowing that fermentation was incomplete, winemakers bottled the young wine, and with the return of warmer temperatures in the spring, fermentation resumed inside the bottle [1].

The technology of this wine is based on the Ancestral Method (la méthode ancestrale), which includes one primary fermentation that begins in the tank and ends in the bottle. The result is a wine with sediment, which retains natural carbon dioxide and has a different content of residual sugar. The disadvantages of the traditional Ancestrale method are the difficulty of

controlling the fermentation process and ensuring full stability and reliability of the process, "capriciousness", instability of the parameters of the process of obtaining and the quality of the finished product [2].

But sparkling wines produced by the Ancestrale method, despite a significant number of risks, are now gaining an increasing percentage of the sparkling wine market, where there is a reformatting of the assortment towards preserving the natural properties of the raw materials and increasing demand for Pét-Nat. Therefore, a detailed study of the production process of these wines is a relevant issue of our time.

Analysis of recent research and publications. Since 2021, there has been a noticeable increase in the production of Pét-Nat worldwide. This development is mainly due to small and medium-sized wineries adapting traditional French techniques to local conditions. The demand for this type of sparkling wine is growing rapidly among consumers, especially during the summer season. The contributing factors to its popularity are naturalness, minimal process intervention and light, refreshing organoleptic characteristics that distinguish Pét-Nat from traditional sparkling wines. The EU remains the main producer of Pét-Nat, accounting for 70–80% of global production, with Italy and France leading the way, so since 2020, imports of Pét-Nat into the EU have been decreasing and are of a consistently low value until 2024 [3, 4].

Among the new producing developing countries, it is worth noting the United Kingdom, Portugal, Brazil and Australia. In 2023, EU production decreased by approximately 8%, with Italy, France and Germany remaining the main producers. But in the export situation, we can see that, starting from 2021, there was an increase of almost twofold and remains at the same level until 2024, despite the decrease in production volumes [4].

The method of production of sparkling wines Pet-Nat Ancestrale has several important stages:

1. Selection of raw materials – the fruits are harvested at the most optimal moment of maturity. This is important to obtain a balance between acidity and sweetness.

2. Primary fermentation – the grape must is fermented naturally in tanks until a sufficient amount of natural sugar remains in the wine.

3. Bottling – unlike the traditional method of production of sparkling wines, where yeast and sugar are added before the second fermentation, in the case of Pet-Nat this is performed at the beginning of the process. The drink is bottled before the primary fermentation is complete, so it is simply continues directly in the bottle. Since the wine still contains residual sugar, the fermentation process proceeds naturally without adding of tirage liqueur, until the yeast cells have processed all the sugar.

4. Corking – the bottles are corked, and the fermentation process continues, forming carbon dioxide. It should be noted that sparkling wines of the Pet-Nat type often have a natural sediment, which is the result of the vital activity of residual yeast and is an indicator of their naturalness. Usually, the wine is not disgorged, so there is a sediment of spent yeast at the bottom of the bottles. Nevertheless, some winemakers disgorge their Pet-Nat to make it look more understandable and attractive to consumers and to reduce an excess pressure when it is needed.

5. Aging – sparkling wines of the Pet-Nat type do not require long aging. They are usually ready for consumption within a few months after bottling.

The advantages of this method are that it is relatively inexpensive, simple, and flexible, as it can be used in home winemaking and industrial settings, but it has many risks and is difficult to control.

Despite the simplicity of Pét-Nat production using the Ancestrale method and the lack of significant material resources, producers in practice face many problems, including the lack of scientifically sound data on the correct choice of raw materials, the influence of individual factors on the technological process and wine quality. In addition, there is little information on general theoretical approaches to organizing the production of Pét-Nat wines using the Ancestrale method. Generalizing existing data on the criteria for assessing the suitability of raw materials for use in Pét-Nat wine technology will help producers improve the quality of Pét-Nat wine, effectively organize the production process and expand the range. The described factors confirm the relevance of research in this direction.

Task statement. *The purpose of the research* is to analyze the state and prospects of the world production of sparkling wines of the Pét-Nat type, to characterize innovations in the technology of their production.

Research objectives:

– to conduct an information search for current information on the world production of sparkling wines of the Pét-Nat type;

– to conduct an analytical review of scientific and technical information on innovations in production technology and trends in the development of the market of sparkling wines of the Pét-Nat type.

Analytical methods were used in the research, as well as methods of cause-and-effect analysis and logical generalization. The methodological basis of the

research was chosen as a meta-analysis, which provided for the search for scientific articles on the relevant topic, a comparative-descriptive analysis of the world production of sparkling wines of the Petillant Naturel type and a generalization of the results of various studies on technologies and trends in the production of sparkling wines of the Petillant Naturel type.

At the first stage of the study, a search for relevant scientific literature was conducted, focusing on articles published in the period 2012-2025 and indexed by the international scientometric databases Scopus, WoS, based on the following code:

– TITLE-ABS-KEY («sparkling wines» AND «Petillant Naturel» AND «production of sparkling wines Petitlant Naturel» AND «Ancestrale»);

– AND (LIMIT-TO (LANGUAGE, «English»))).

Information from databases, including PubMed, CrossRef, etc., was also analyzed.

The search resulted in 70 publications, after analyzing each article and clarifying the direction of the research and the availability of the necessary results, the sample for meta-analysis was limited to 21 original articles. The frequency of displaying articles on the research topic, according to the search code and the results of the extended analysis, in individual journals ranged from 3 to 1 unit. The number of journals, each of which published more than 3 articles for the study period 2012–2025, was 2 journals.

Outline of the main material of the study. The term «Pét-Nat» is usually used to describe a sparkling wine with a lower carbon dioxide level than traditional champagne.

A new direction in the development of Pet-Nat carbonated beverage technologies is sparkling ciders. Quality assessment of natural sparkling Pet-Nat ciders made in the traditional Ancestrale method from different varieties of Croatian apples showed that the pH value, color, aromatic and sensory profile of the final product varied significantly depending on the variety, confirming the importance of choosing the right variety of raw materials [2, 5].

The traditional grape variety used to make Pét-Nat in France is Mauzac (Blanquette), which is characterized by a characteristic taste of dried apple peel. The domestic and global alcoholic beverage market is experiencing an increase in the popularity of sparkling wines of the Pét-Nat type, the technology of which uses fruit and berry raw materials, in particular cherries, apples, etc.

Ukrainian Pét-Nat producers mostly focus on creating white wines from local grape varieties such as Tsytronnyi Maharacha, Sukholimanskiy white and Telti-Kuruk, and also use European varieties such as Muscat Ottonel. Pinot Noir and Merlot are most often used for the production of rosé Pét-Nat wines, which provide a wide range of aromas and flavors in the final product [6, p. 2370-2371].

Studies of the technological features of the production of sparkling wines of the Pétillant Naturel type, made using the Ancestrale method from Muscat Ottonel and Pinot Noir grapes, have shown that Pét-Nat wines are characterized by lower acidity, higher levels of residual sugar, more pronounced fruity and floral aromas, greater richness and the presence of creamy notes due to prolonged contact with the lees. In contrast, sparkling wines made using the tank method are characterized by higher acidity, lower carbon dioxide content and a less pronounced flavor profile. The results highlight significant sensory differences between experimental samples, driven by both technological factors and grape varietal characteristics, and confirm the great potential of Pét-Nat production in meeting the demand of consumers seeking natural and authentic wines [7, p.295-298].

Other studies have shown that sparkling wines produced by the Ancestrale method were more heterogeneous than sparkling wines produced by the tank method, as some of them showed higher internal pressure, turbidity, color intensity and gas content. These differences are probably due to the fact that the Ancestrale sparkling wine production protocol does not have a clearly developed methodology, as for traditional sparkling wines produced by the tank method.

Scientists note the sensory profile of sparkling wines produced by the Ancestral method and are characterized by an enhanced floral and citrus aroma, an intense yellow color, creaminess, and fullness of taste due to a wider spectrum of volatile ester compounds. It was concluded that the efficiency of this method is higher, since it is possible to produce a product faster with fewer stages, compared to the Charm method and artificial gasification [8, p. 324-327].

The search for the optimal yeast strain for obtaining high-quality sparkling wines without yeast notes showed that wines made with the Odessa Black-SD13 yeast strain received the highest tasting scores. They contained a higher amount of phenolic substances (1103 mg/dm^3), dyes (275 mg/dm^3) and a higher color intensity (1.614). This yeast strain provided intensive fermentation of sugars and a large amount of bound CO_2 (up to 24.93%) [9, p. 2080-2085].

Thus, the determining factors for ensuring the stability of the production process and obtaining high-quality and authentic Pét-Nat wine are the

chemical composition of the must, fermentation management and a clear bottling protocol.

Grape varieties such as Riesling, Albarino and Pinot Noir, and among the hybrid varieties – Catawba, Diamond and Marquette are excellent for the production of Pét-Nat. The main requirements for the raw material are bright acidity and a lower amount of phenols. But greater requirements are placed on the quality of the must from which the wine will be made [10].

In general, the characteristics of the must that ensure high wine quality are: high acidity, low tannin content and sufficient YAN (yeast-assimilable nitrogen). It is known that CO_2 content and acidity have a synergistic relationship: carbonation slightly acidifies the wine, and acid helps to harmoniously integrate carbonation, which is why usually high acid grapes are often more privileged. A titrated acidity value of 8–12 g/l of tartaric acid is usually the optimal range [11].

Tannins increase the undesirable astringency of the wine, so their amount should be limited. Tannin extraction can be minimized by limiting the contact time between crushing and pressing. If the juice is excessively astringent, excess tannins can be removed by clarifying the protein with egg white, skimmed milk or gelatin.

YAN is the chemical parameter that most influences the state of fermentation. If the YAN is low, fermentation is inhibited and automatically spoils the quality of the wine. If the YAN is high, fermentation can proceed too quickly, with the residual sugar being a source of nutrition for wild yeasts that cause wine spoilage. The optimal value of YAN depends on the yeast strain and fermentation conditions, but traditionally, within 100–200 ppm, fermentation is fully ensured.

It can be stated that, at the rate of 0.5 to 0.6% vol per °Brix to be fermented, the ideal initial sugar level for Pét-Nat is 15–25°Brix. [12, 13].

The pressure indicator can be used to regulate the fermentation process. When the internal pressure in the bottle approaches 6 atm, the vital activity of the yeast is inhibited and fermentation stops, leaving any remaining sugar unfermented, which can be used to stabilize the taste properties of the wine with higher acidity.

It is definitely necessary to ensure the authenticity of Pét-Nat wine at the expense of the natural microflora of the raw material, without the introduction of commercial yeast strains. But there is no doubt that the use of commercial yeast is one of the ways to ensure the stability of the process and the quality characteristics of the wine. Having studied the characteristics of yeast strains in advance, it is possible to adjust and predict the course of the technological process. In the production of sparkling wines, the classic strains are Lalvin EC-1118, Prise de Mousse. EC-1118 meets all the requirements for yeast strains for this technology: high resistance and low nitrogen demand, stable fermentation speed, compact sedimentation and cold resistance [14-16].

It is necessary to carefully control the speed and temperature of fermentation. If fermentation occurs too quickly, it can be slowed down by cooling the medium to 10-13°C (50-55°F).

The correct timing of bottling, the use of spray additives and the use of quality bottling containers play a significant role in shaping the organoleptic and visual profiles of Pét-Nat wines, as they affect the level of carbonation and residual sugar in the finished wine.

An additional benefit of chilling the wine to stop fermentation before bottling is the stabilization of tartrates. If tartrates are not effectively stabilized, they can settle in the bottle, which can lead to gushing – excessive bubble formation.

The addition of a bentonite suspension at a concentration of 100–300 ppm before bottling has a positive effect on the clarity and stability of the finished product, promoting compact settlement of spent yeast [17, 18].

Pét-Nat wines should be bottled in champagne bottles, ensuring tightness. Since the pressure in the wine can reach 6 atm (provided that it was bottled at a strength of 2.4–3°Brix or higher), using an airtight bottle is the most reliable way to prevent excessive fermentation of the wine [19].

After bottling, aging the wine at a temperature of 10–16 °C (50–60 °F) for 1–2 months finally completes the fermentation and the wine is ready for consumption.

Thus, the key differences between Pét-Nat wine and traditional sparkling wines are higher acidity, low carbon dioxide content, predominance of fruity and floral aromas, and residual sugar content, which are influenced by specific features of the production process (e.g., no secondary fermentation under pressure, aging on the lees, no disgorging) [20, 21].

Conclusions. The reformatting of the structure of the sparkling wine range towards preserving the natural properties of raw materials, naturalness and the status of «Clean Lebel» has led to the growth of the popularity of Pét-Nat wines.

An analytical review of scientific and technical literature confirmed that Pét-Nat sparkling wines produced by the Ancestral method lead to the creation of a product with unique sensory characteristics, different from traditional sparkling wines produced by the

Charmat method. And the use of non–traditional raw materials contributes to the expansion of the range of such wines.

Pét-Nat has the potential to meet the needs of consumers who value naturalness, minimal intervention in the technological process and authentic taste, which creates significant opportunities for the further development of this category of wines in Ukraine and the world.

The method of production of Pét-Nat Ancestral is simple, inexpensive, but the «spontaneity» of the process and the lack of control of key stages of the technological process cannot guarantee stable wine quality. Therefore, the «unpredictability» of the quality indicators of the finished wine inhibits the industrial development of Pét-Nat wines and limits the application of the technology only to home conditions or small-scale enterprises. This confirms the scientific novelty of the chosen direction of research, namely, the development of a methodology for the production of Pét-Nat wines and the search for ways to improve control of the technological process.

Bibliography:

1. Just Borràs, A. Ancestral sparkling wines; Comparison with traditional sparkling wines and procedures to improve their quality. Universitat Rovira i Virgili. 2024. P. 274. URL: http://hdl.handle.net/10803/691833 (accessed on 24 November 2025)

2. Just-Borràs A., Alday-Hernández M., García-Roldán A., Bustamante M., Gombau J., Cabanillas P., Rozès N., Canals J. M., Zamora F. Assessment of physicochemical and sensory characteristics of commercial sparkling wines obtained through ancestral and traditional methods. *Beverages*. 2024. № 10(4). P. 103. https://doi.org/10.3390/beverages10040103

3. Kucherenko V., Uspalenko O., Schmitt M. Natural sparkling wine pétillant naturel: technological features and sensory profile. IVES Conference Series, 46th World Congress of Vine and Wine. 2025. https://doi.org/10.58233/XPfta0jt (accessed on 24 November 2025)

4. Jagati´c Korenika A.-M., Preiner D., Tomaz I., Skendrovi´c Babojeli´c M., Jeromel A. Aroma Profile of Monovarietal Pét-Nat Ciders: The role of croatian traditional apple varieties. Horticulturae. 2022. № 8. P. 689. https://doi.org/10.3390/horticulturae8080689

5. Asimov E. The natural style reaches into its bubbly past. New York: New York Times, D4(L), 2018. URL: https://link.gale.com/apps/doc/A530894951/AONE?u=anon~3bbc5ac4&sid=googleScholar&xid=3f5aeec4 (accessed on 24 November 2025)

6. Dachery B., Hernandes K.C., Zini C.A., Welke J.E., Manfroi V. Volatile and sensory profile of sparkling wines produced byfaster and alternative methods (Ancestral and Single Tank Fermentation) compared to the usual methods (Charmat and Traditional). *European Food Research and Technology*. 2023. № 249. Pp. 2363–2376. https://doi.org/10.1007/s00217-023-04303-z

7. Makarov A., Lutkov I. Yeast race effect on the quality of base and young sparkling wines. *Foods and Raw Materials*. 2021. № 9. Pp. 290–301. https://doi.org/10.21603/2308-4057-2021-2-290-301

8. Cisiloo B., Scariot F.J., Schwarz L.V., Rocha R.K.M., Delamare A.P.L., Echeverrigaray S. Are the characteristics of sparkling wines obtained by the Traditional or Charmat methods quite different from each other? *OENO One.* 2023. № 57. Pp. 321–331 https://doi.org/10.20870/oeno-one.2023.57.1.7313

9. Kemp B., Condé B., Jégou S., Howell K., Vasserot Y., Marchal R. Chemical compounds and mechanisms involved in the formation and stabilization of foam in sparkling wines. *Critical Reviews in Food Science and Nutrition.* 2018. № 59. Pp. 2072–2094. https://doi.org/10.1080/10408398.2018.1437535

10. Cravero M.C. Innovations in sparkling wine production: A review on the sensory aspects and the consumer's point of view. *Beverages.* 2023. № 9. P. 80. https://doi.org/10.3390/beverages9030080

11. Luchian C. E., Grosaru D., Scutarașu E. C., Colibaba L. C., Scutarașu A., Cotea V. V. Advancing sparkling wine in the 21st century: from traditional methods to modern innovations and market trends. *Fermentation.* 2025. № 11(4). P. 1174. https://doi.org/10.3390/fermentation11040174

12. Eder M.L.R., Rosa A.L. Non-conventional grape varieties and yeast starters for first and second fermentation in sparkling wine production using the traditional method. *Fermentation.* 2021. № 7. P.321. https://doi.org/10.3390/fermentation7040321

13. Di Gianvito P., Arfelli G., Suzzi G., Tofalo R. New trends in sparkling wine production: Yeast rational selection in alcoholic beverages. *In Alcoholic Beverages/* Grumezescu, A.M., Holban, A.M., Eds. Woodhead publishing: Duxford, UK, 2019. № 7. Pp. 347–386. https://doi.org/10.1016/B978-0-12-815269-0.00011-8

14. Cotea V.V., Focea M.C., Luchian C.E., Colibaba L.C., Scutarașu E.C., Marius N., Zamfir C.I., Popîrdă A. Influence of different commercial yeasts on volatile fraction of sparkling wines. *Foods.* 2021. № 10. P. 247. https://doi.org/10.3390/foods10020247

15. Buxaderas S., López-Tamames E. Sparkling wines: Features and trends from tradition. Adv. *Advances in Food and Nutrition Research*. 2012. № 66. Pp. 1–45. https://doi.org/10.1016/B978-0-12-394597-6.00001-X

16. Ubeda C., Callejón R.M., Troncoso A.M., Peña-Neira A., Morales M.L. Volatile profile characterisation of Chilean sparkling wines produced by traditional and Charmat methods via sequential stir bar sorptive extraction. *Food Chemistry*. 2016. № 207. Pp. 261–271. https://doi.org/10.1016/j.foodchem.2016.03.117

17. Ferreira-Lima N.E., Burin V.M., Bordignon-Luiz M.T. Characterization of Goethe white wines: Influence of different storage conditions on the wine evolution during bottle aging. European Food Research and Technology. 2013. № 237. Pp. 509–520. https://doi.org/10.1007/s00217-013-2019-5

18. Shanshiashvili G., Baviera M., Fracassetti D. Exploring grape pressing for sparkling wine production: A comprehensive literature review on physicochemical parameters and technological applications. *Applied Food Research.* 2024. № 4. P. 100454. https://doi.org/10.1016/j.afres.2024.100454

19. Puig-Pujol A., Bertran E., García-Martínez T., Capdevila F., Mínguez S., Mauricio J.C. Application of a new organic yeast immobilization method for sparkling wine production. *American Journal of Enology and Viticulture.* 2013. № 64. Pp. 386–394. https://doi.org/10.5344/ajev.2013.13031

20. Comitini F., Capece A., Ciani M., Romano P. New insights on the use of wine yeasts. *Current Opinion in Food Science*. 2017. № 13. Pp. 44–49. https://doi.org/10.1016/j.cofs.2017.02.005

21. Berbegal C., Polo L., García-Esparza M.J., Álvarez I., Zamora F., Ferrer S., Pardo I. Influence of the dry yeast preparation method on final sparkling wine characteristics. *Fermentation.* 2022. № 8. P.313. https://doi.org/10.3390/fermentation8070313

Ковач О.І. СВІТОВЕ ВИРОБНИЦТВО ІГРИСТИХ ВИН ТИПУ ПЕТ-НАТ (PETILLANT NATUREL), ТЕХНОЛОГІЇ ТА ТЕНДЕНЦІЇ

Pét-Nat (Petillant Naturel) є найдавнішим видом ігристих вин у Франції, який виготовляється методом Ancestrale та передує появі шампанського. Нині ці вина стають найпопулярнішим трендом у галузі виноробства, привертаючи увагу своєю натуральністю, автентичністю та відсутністю складних технологічних процесів. Мета: проаналізувати стан та перспективи світового виробництва ігристих вин типу Petillant Naturel, охарактеризувати інновації в технології їх виробництва. Методи. Методологічною основою був мета-аналіз, що передбачав пошук наукових статей за відповідною тематикою, порівняльно-описовий аналіз світового виробництво та узагальнення результатів різних досліджень щодо технологій та тенденцій виробництва ігристих вин типу Petillant Naturel. Результати. ЄС залишається основним виробником Pét-Nat, на який припадає 70-80% світового виробництва, причому лідерами є Італія та Франція, тому починаючи з 2020 року імпорт Pét-Nat до ЄС знижується та має стабільно низьке значення до 2024 р. Недоліками методу Ancestrale є складність контролю процесу бродіння та забезпечення повною мірою стабільності та надійності, «примхливість» технології. До переваг належить те, що він відносно незатратний, простий, гнучкий, оскільки його можна використовувати в домашньому виноробстві та промислових умовах, але при цьому він має багато ризиків і його складно контролювати. Це підтверджує актуальність розробки методології виробництва вин Pét-Nat та пошук способів покращення контролю технологічного процесу. Визначальними факторами для забезпечення стабільності процесу виготовлення та отримання якісного і автентичного вина Pét-Nat є хімічний склад соку, управління ферментацією та чіткий протокол розливу. Сорти винограду, такі як Рислінг, Альбаріньо та Піно Нуар, а серед гібридних сортів – Катавба, Даймонд та Маркетт традиційно використовують в технології вина Pét-Nat. Ключові відмінності між вином Pét-Nat та традиційними ігристими винами, що визначають якість цих вин є вища кислотність, низький вміст діоксиду вуглецю, широка палітра смако-ароматичних характеристик в бік переважання фруктових, тропічних та квіткових ароматів, вміст залишкового цукру, на які впливають специфічні особливості виробничого процесу (наприклад, відсутність вторинного бродіння під тиском, витримка на осаді, відсутність дегоргажу).Pét-Nat має потенціал задовольнити потреби споживачів, які цінують натуральність, мінімальне втручання в технологічний процес та автентичний смак, що створює значні можливості для подальшого розвитку цієї категорії вин в Україні та світі.

Ключові слова: *ігристе вино, виноробство, petillant naturel, технологія виноробства, виробництво, тенденції виноробства.*

Дата першого надходження статті до видання: 23.01.2026
Дата прийняття статті до друку після рецензування: 17.02.2026
Дата публікації (оприлюднення) статті: 08.04.2026