

Content Specifications Document

Journal Code: 10590

Issue Information

Volume: 16

Number: 1

Cover Date (month and year): April 2024

Individual Article Information

Filename: AGR-2024-04-01.pdf

DOI: 10.2478/AGR-2024-0001

Title: PHYTOCHEMICAL STUDY OF THE THREE MAIN ONION VARIETIES (ALLIUM CEPA L.) GROWN IN ALGERIA

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Abstract:

Three species of *Allium cepa* (red, purple, yellow) were evaluated for their secondary metabolite content, free radical scavenging activity (DPPH), and ferric reducing ability (FRAP). Our findings confirm that the dry matter content in all varieties ranged from 12.3% to 18.1%, rendering them suitable for extended storage. The ethanolic extract of red onion (EERO) displayed the highest yield (3.86%). Similarly, the levels of total phenols (TPC), total flavonoid content (TFC), hydroxycinnamic acid (HTC), and cysteine-containing peptide (CTC) varied between 0.14 and 0.27 mg/g GAE, 0.20 and 0.29 mg/g QE, 0.25 and 0.29 mg/g GAE, and 0.015 and 0.102 mg CE/g DW, respectively. Furthermore, ethanolic extract of yellow onion (EEYO) demonstrated a significant iron reduction capacity (0.75 ± 0.06 mM Fe²⁺) and an IC₅₀ of 0.159 ± 0.18 mg/ml, indicating enhanced antioxidant potential.

Filename: AGR-2024-04-02.pdf

DOI: 10.2478/AGR-2024-0002

Title: ETHNOBOTANICAL STUDY OF AN ASTERACEAE ARTEMISIA HERBA ALBA (ASSO.) IN CHOTT EL GHARBI (WESTERN ALGERIA)

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Abstract:

The objective of this work is to identify the therapeutic uses of medicinal plants in the Chott El Gharbi region through ethnobotanical surveys carried out on a local population who have

used phytotherapy for a long time in a way transmitted from generation to generation. The investigation was carried out in the two communes of Chott El Gharbi. Among the botanical families of the species most used in herbal therapy, Lamiaceae and Asteraceae. The best-known species in various treatments is *Artemisia herba alba* (Asso.). The leaves represent the most used parts of plants and the decoction represents the most frequent method of preparation.

Filename: AGR-2024-04-03.pdf

DOI: 10.2478/AGR-2024-0003

Title: EVALUATION OF MORPHOLOGICAL CHARACTERISTICS IN SOME APPLE VARIETIES (*MALUS PUMILA* MILL.) FROM NORTH-EASTERN ALGERIA

Author(s): Ismail Zeroual^{1,2}, Abdelaziz Benaziza³, Farah Adjal¹, Abdenour Kheloufi⁴

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Abstract:

The current investigation is centered on the characterization of specific apple cultivars in the Garza region, within the Teniet El Abed municipality, situated 55 km east of Batna (NE-Algeria). Utilizing descriptors outlined by UPOV 2015 pertaining to apples, the study focuses on morphological parameters of leaves, fruits, and terminal shoots across three varieties: Golden Delicious, Royal Gala, and Starkrimson. Additionally, soil analysis was conducted to ascertain its suitability for apple cultivation. The examination revealed limited morphological diversity among the investigated apple cultivars, with some descriptors, particularly those related to fruit traits, showing insignificant differences between cultivar types. Overall, the studied varieties - Golden Delicious, Royal Gala, and Starkrimson - exhibit distinct physiological and morphological characteristics. Variations in size, shape, skin color, flesh attributes, as well as sugar and acid content, contribute to the uniqueness of each variety. Whether one prefers sweet or tart apples, or favors larger or smaller fruits, there exists an apple variety to cater to individual tastes. Our findings complement molecular analyses and underscore the need for further exploration of apple germplasm, alongside sustained conservation efforts.

Filename: AGR-2024-04-04.pdf

DOI: 10.2478/AGR-2024-0004

Title: FACTORS INFLUENCING MILK YIELD DURING LACTATION OF D'MAN EWES IN ITS CRADLE IN ALGERIA

Author(s): Abderrahmen Boubekour^{1,2}, Mohammed Tahar Benyoucef³, Abdelkade Maaraf⁴, Mohammed Souddi²

Affiliation(s): ¹Higher School of Saharan Agriculture - Adrar, Algeria; ²Laboratory of Saharan Natural Resources, Faculty of Natural and Life Sciences, University of Ahmed Draia - Adrar, Algeria; ³National Institute of Agronomic Research, Adrar Station, Algeria; ⁴National Higher School of Agronomy, El-Harrach, Algiers, Algeria

Abstract:

A study was conducted at the National Institute of Agricultural Research (Adrar station) between 2017 and 2019 to assess the milk yield potential of prolific D'man ewes. A total of 210 daily milk production records from (of) 21 D'man ewes were collected during three successive lambings with the weighing method before and after feeding followed by manual milking. In addition, the effects of birth type, lambing rank, birth season and weight of ewes to the struggle (at breeding) on milk production were analyzed. The least-squares averages of daily and total milk production of D'man ewes were 0.85 ± 0.03 kg and 59.1 ± 0.96 kg,

respectively, and the highest daily milk yield was observed in the second week of lactation. Ewes suckling more than two lambs had the highest milk yield. Indeed, ewes with triplets or more (+57.3%) and twins (+22.1%) have a significantly higher milk yield ($P < 0.01$) than ewes nursing single lambs. The effect of the other factors was not significant on milk production of D'man ewes. It can be concluded that increasing the quantity of milk produced per ewe according to the number of lambs suckled will help to make the most of multiple lambings thanks to a low mortality rate and improved growth, especially during the first month of lactation.

Filename: AGR-2024-04-05.pdf

DOI: 10.2478/AGR-2024-0005

Title: NUTRITIONAL AND SENSORY CHARACTERIZATION OF SOME FERMENTED FOOD PRODUCTS MADE IN THE CARPATHIAN-DANUBIAN-PONTIC AREA

Author(s): Mihaela Dana Pop

Affiliation(s): Food Consultant

Abstract:

The territory of Romania has been known as the Carpathian-Danubian-Pontic space since ancient times, being traversed from one end to the other by the Carpathian Mountains and being bordered to the south by the Danube River (Danubius) which flows into the Black Sea (Pontic area). Fermented food products manufactured in Romania belong to the many categories, such as: lactic acid dairy products or fermented dairy products (yogurt, sana, buttermilk, kefir, fermented cream, fresh cheese), pickled vegetables (cabbage, cucumbers, red pepper), non-alcoholic fermented beverages (braga, borsch, vinegar, socata), traditional fermented bread, matured cheeses, raw dried salami and alcoholic beverages (beer, wine). In the present article we will focus on a nutritional and sensory characterization of the most famous fermented products that are manufactured almost exclusively in the Carpathian-Danubian-Pontic area, of course also due to the influence of the neighbours, this being: fermented dairy products (yoghurt, sana and buttermilk), lactic fermented pickles (pickled cabbage) and non-alcoholic fermented drinks (braga, borsh and socata).

Filename: AGR-2024-04-06.pdf

DOI: 10.2478/AGR-2024-0006

Title: WHAT MESSAGE DOES WINE SEND TO THE CONSUMER THROUGH THE LABEL

Author(s): Gabriela Teodorescu

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Abstract:

Wine is a complex product that goes from the concept of food to that of hedonic drink in the perception of consumers. In this context, it is very important for wine producers to understand the factors of perception of consumer quality but also the relative importance they attach to these factors when deducting the quality of wine to meet these expectations, needs or desires. The existing label on a bottle of wine must contain practical and accurate information so that the consumer makes the purchase decision instead of a similar products. Buying wine in the retail store system (specialized stores) should not hurt more than ten minutes (2003, Schnettler and Rivera). So, both the information on the label and the product evaluation will be closely related to the time consumers need to observe and analyze them (2017, Krishna et al.). If we include the information such as: the designation of origin, therapeutic recommendations, nutritional information, have a great influence on the intention to purchase and as a result this aspect requires in-depth studies. Content is especially important for experienced consumers who are looking for relevant information available to be sure of their purchase. This article

presents importance to wine specialists, experts, research, as a starting point in understanding information about consumers behavior for the same products and markets. They can be used as a guide to identify similarities in consumer behaviors for different products with wine-like features. We aim to complement this research with recent findings and conclusions related to consumer behavior by studying culture and noting differences in the country, culture, religions or races in wine consumption. We can provide a general picture of the current state of education of the factors of perception of wine quality through sensory analysis. To this end, the factors determining the perceived state of the wine as a product, the state of the consumer and the state of consumption shall be analyzed first. Then, the most widely used methodologies are discussed to study the hedonic sense of consumers. Finally, the characteristics of wine related to the perception of the quality are evaluated.

Filename: AGR-2024-04-07.pdf

DOI: 10.2478/AGR-2024-0007

Title: RESEARCH ON SOME BIOLOGICAL AND TECHNOLOGICAL ASPECTS OF THE SPECIES HYACINTHUS ORIENTALIS (FAM. LILIACEAE)

Author(s): Sînziana Venera Morărița

Affiliation(s): Valahia University of Targoviste, 13, Sinaia Alley, Targoviste, Romania

Abstract:

In a vase or in a pot, in a bouquet or in an arrangement, in the house, in the garden or in the park, alone or in combination, flowers are just as many occasions of joy that we give to ourselves or to our loved ones. Messengers of human thoughts and feelings, flowers contribute to the development of social relations, reflecting in the most brilliant way the refinement, taste and personality of man. Some authors expand the area of use of some of the flowers in the food sphere, considering them edible flowers. However, flowers mean, above all, love, love, hope, trust, appreciation, lust for life; through them we express everything that is noblest and most beautiful in the life of each of us. It is certain that if each of us understood - even just for a moment - the extraordinary message that a flower so eloquently conveys, then the world we live in would be much better. Flower culture at a high technological level cannot be done without thorough knowledge of biology, plant physiology and ecology, genetics and plant breeding, agrochemistry, pedology, agrotechnics, phytopathology and entomology, and for the commercialization of production and ensuring economic profitability, it is also necessary marketing knowledge and market research. Knowing the biological properties of plants and their reaction to different environmental conditions and agrotechnical works are essential in the design and application of a high-performance technology. The mastery of this information in the sphere of the disciplines mentioned above denotes a high qualification of the florist specialist and the satisfaction of successful crops is possible only by doubling this qualification with intense work, done with a lot of passion and dedication.

Filename: AGR-2024-04-08.pdf

DOI: 10.2478/AGR-2024-0008

Title: REVIEWING THE ROLE OF FUNCTIONAL INGREDIENTS IN IMPROVING IMMUNE HEALTH AND DISEASE MANAGEMENT IN BREEDING ANIMALS: CURRENT PERSPECTIVES AND EMERGING TRENDS

Author(s): Raluca Aniela Irimia (Gheorghe), Dana Tăpăloagă, Cosmin Șonea, Oana Mărgărita Ghimpețeanu, Maria Rodica Gurău, Paul-Rodian Tăpăloagă

Affiliation(s): University of Agronomic Sciences and Veterinary Medicine of Bucharest, 59 Marasti Blvd, District 1, Bucharest, Romania

Abstract:

This review delves into recent advancements in livestock research, focusing on genetic diversity, disease resistance, and immune function. Through an in-depth analysis of various

studies, this review elucidates the intricate interplay of genetic factors influencing disease susceptibility and resilience in livestock populations. Investigations highlight the efficacy of functional ingredients, such as plant extracts and marine-derived compounds, in enhancing immune health and disease resistance in breeding animals. Additionally, the review examines the molecular mechanisms underlying the immunomodulatory effects of specific ingredients, shedding light on signaling pathways and gene expression profiles involved in bolstering immune function. Furthermore, the review explores emerging trends in livestock nutrition, including the utilization of fruit processing by-products to improve animal health and performance. Insights into the role of prebiotics in modulating gut microbiota and mitigating diet-related maladies provide valuable perspectives for enhancing livestock welfare and productivity. By synthesizing these findings, this review underscores the critical importance of genetic selection, dietary interventions, and immunomodulatory strategies in promoting the health and resilience of livestock populations.

Filename: AGR-2024-04-09.pdf

DOI: 10.2478/AGR-2024-0009

Title: STUDY ON THE EVOLUTION OF GENETIC RESOURCES OF DOMESTIC ANIMALS IN ROMANIA

Author(s): Mariana Sandu¹, Amalia Gianina Străteanu¹, Lavinia Udrea²

Affiliation(s): ¹Romanian Academy, Center for Studies and Researchers of Agroforestry Biodiversity, Calea 13 Septembrie, no. 13, 5th District, Bucharest, Romania, ²Valahia University of Targoviste, 13, Sinaia Alley, Targoviste, Romania

Abstract:

The paper proposes the identification of animal breeds at risk of abandonment and the analysis of animal genetic resources from the perspective of the evolution of total herds and genetic quality determination programs. Data from the National Institute of Statistics show that in the period 2015-2022, Romania recorded a decline in the total livestock of cattle (-12.34%) and pigs (-32.44%) and slight increases in the total sheep and goats. On the other hand, the National Agency for Animal Husbandry indicates significant decreases in the number of breeding females, both in cattle (-14.7%) and pigs (-32.5%). Within the 4 species of animals analysed (cattle, sheep, goats and pigs), 14 breeds in danger of abandonment were identified, generally native breeds with lower production potential than that of improved breeds. For the identified animal breeds, genetic quality determination programs have been approved, which are implemented by animal breeders' associations accredited for the establishment and management of Genealogical Registries. Maintaining the genetic diversity of local breeds in danger of abandonment can contribute to the diversification of existing populations, to restoring the vitality of selected lines, to increasing the productivity and disease resistance of animals.

Filename: AGR-2024-04-10.pdf

DOI: 10.2478/AGR-2024-0010

Title: OPTIMIZING FEED FORMULATION STRATEGIES FOR ATTAINING OPTIMAL NUTRITIONAL BALANCE IN HIGH-PERFORMING DAIRY GOATS IN INTENSIVE FARMING PRODUCTION SYSTEMS

Author(s): Cosmin Șonea¹, Raluca Aniela Gheorghe-Irimia¹, Makki Khalaf Hussein Al Dulaimi², Lavinia Udrea³, Dana Tăpăloagă¹, Paul-Rodian Tăpăloagă¹

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Abstract:

Genetic factors play a pivotal role in shaping feed formulation strategies for dairy goats, influencing milk production, composition, and overall productivity through the modulation of genetic parameters and polymorphisms associated with milk protein fractions and yield. Moreover, environmental challenges, including heat stress and feed availability fluctuations, pose significant hurdles in achieving optimal nutrition and performance, necessitating precision livestock farming and the utilization of local by-products to mitigate their impact on herd health and productivity. In addition, nutritional interventions, such as supplement utilization and alternative feed incorporation, offer promising avenues for addressing specific deficiencies and enhancing overall performance, from fatty acid supplementation to herbal feed additives, while balancing rations to meet evolving nutritional needs and ensuring long-term sustainability remains paramount for optimizing herd nutrition, health, and performance in intensive dairy goat production systems. The aim of this study was to explore the multifaceted influences of genetic factors, environmental challenges, and nutritional interventions on feed formulation strategies and overall herd nutrition, health, and performance in intensive dairy goat production systems.

Content Specifications Document

Journal Code: 10590

Issue Information

Volume: 16

Number: 2

Cover Date (month and year): October 2024

Individual Article Information

Filename: AGR-2024-11-01.pdf

DOI: 10.2478/AGR-2024-0011

Title: TYPOLOGY OF LIVESTOCK FARMING IN THE OASIS AGROSYSTEMS OF ADRAR (SOUTH-WESTERN ALGERIA)

Author(s): Lahbib Cheikhi, Hafidha Boucherit, Benaradj Abdelkrim

Affiliation(s): Laboratory of Sustainable Management of Natural Resources in Arid and Semi-Arid Areas, Salhi Ahmed University Center of Naama, Algeria

Abstract: For centuries, the Saharan oasis agro-systems of Adrar region have fed many generations, based on an original organization, based on the efficiency of drainage water on the diversification of crop systems in association with small livestock farming. The aim of the work is to describe the systemic typology of oasis livestock farming in the Adrar region (southwest Algeria). In order to assess the livestock typology, a series of surveys were conducted on 164 farms in the oases of the study region. The analysis reveals that the production system, traditionally aimed at subsistence agriculture. The dominant production system is an intensive system, characterized by intensive mixed food crops (Phoeniciculture, arboriculture, herbaceous crops: cereals, fodder, market gardening, industrial and condiment crops), in association with livestock farming mainly of small ruminants (goats and sheep). The livestock system is characterized by a family type, small in size in traditional management. It is generally managed in stalls and its feed comes mainly from fodder crops, domestic waste and by-products of palm groves. Family livestock farming can be an important source to ensure a certain production of animal origin (milk and meat) for family self-consumption. As a result, it can contribute to ensuring food security, family financial security and improving soil fertility in oasis farm plots.

Filename: AGR-2024-11-02.pdf

DOI: 10.2478/AGR-2024-0012

Title: STUDIES ON TECHNOLOGICAL ASPECTS OF THE SPECIES TULIPA GESNERIANA (FAM. LILIACEAE)

Author(s): Sinziana Venera Morărița

Affiliation(s): Valahia University of Targoviste, 13, Sinaia Alley, Targoviste, Romania

Abstract: Flowers represent one of those perfect joys of life, they are almost always with us and surround us with their splendor, tenderness and fragrance, from the first days of our lives, at some of the most important moments in life (anniversaries, special events, baptisms, weddings, etc.); and still with the flowers we leave this world. Precisely for these reasons, flowers deserve special attention. They are described both in verse and in prose by the most famous writers, who manage to convey their beauty and tenderness to us, and the plastic artists are the ones who, through their brushes, have managed to transpose nature and especially flowers on canvas, so that to create a universe of infinite beauty, awakening strong emotions

and feelings in our soul. Consequently, it is all man who has the duty to carry forward, by his own means, the art of growing flowers and to create a more beautiful and better world for everyone else. Over the years, several types of floral arrangements, garden arrangements that include flowers have been highlighted. Tulips are easy to plant and care for. These spring flowers are among the favorites of gardening enthusiasts, due to the multitude of colors, shapes and sizes in which they are found. Used in the most diverse combinations, tulips delight the eyes and soul of viewers, bringing an inner peace that we all need.

Filename: AGR-2024-11-03.pdf

DOI: 10.2478/AGR-2024-0013

Title: FLORISTIC CHARACTERIZATION OF GRASSY STEPPE GROUPS IN NAAMA REGION (ALGERIA)

Author(s): Wahiba Attaoui, Abdelkrim Benaradj, Lame Bourahla

Affiliation(s): Laboratory of Sustainable Management of Natural Resources in Arid and Semi-Arid Areas, Salhi Ahmed University Center of Naama, Algeria

Abstract:

The present work aims to illustrate the current state of steppe rangelands based on three plant formations: *Stipa tenacissima*, *Lygeum spartum* and *Stipagrostis penguins*, and to describe the different floristic processions linked to these species in Nâama region with an arid climate. The phytocological study is based on qualitative and quantitative analyses through 150 floristic surveys carried out during the spring period of the year 2022 in Nâama region. The floristic analysis enabled the identification of 62 taxa belonging to 23 families and 53 genera. The floristic procession is very rich and diverse in the three plant formations according to the Shannon indices (between 2.85 and 3.59) and equitability (0.68 and 0.86), where Asteraceae and Poaceae dominate the herbaceous layer in the study area. The three plant formations have great ecological plasticity and occupy an important place in the steppe rangelands of Naama. They tolerate extreme environmental conditions (drought, aridity, sandy substrates) well through adaptations using various strategies for occupying these specialized environments. The floristic evaluation of the steppe rangelands is necessary, even mandatory; in order to assess the pastoral potential and to identify solutions for the restoration and rehabilitation of these degraded steppe areas.

Filename: AGR-2024-11-04.pdf

DOI: 10.2478/AGR-2024-0014

Title: SENSORY ANALYSIS AND EMOTIONAL RESPONSE OF THE CONSUMER

Author(s): Gabriela Teodorescu

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Abstract: Wine is a dynamic product that has been discussed about for millennia in many areas of the world. For a product with such a legacy, which has forged links with many cultures, there should be a shared and original vocabulary. In order to meet this demand for description and assessment of wines, the sensory analysis of wine has been enhanced. But, for this we need to train and develop the capacity of judges to describe the sensory characteristics provoked by visual, aromatic and taste-sensing perceptions. Wine is not a product simple to describe and judge. In reality, the human senses have not accurate measures of these stimuli because of physiological or mental limitations (Lawless 1999). Conventional sensory analysis, as a result, seems to create a dialogue link between wine specialists and audiences. Moreover, given that consumer tastes are different and are not shaped only by the quality attributes of food.

Filename: AGR-2024-11-05.pdf

DOI: 10.2478/AGR-2024-0015

Title: APPLICATION TRIAL OF ESSENTIAL OIL EXTRACTED FROM CITRUS AURANTIUM IN FOOD PRODUCTS (MINCED MEAT)

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Abstract: In recent years, humans have turned to herbal remedies to solve a variety of problems, both food-related and health-related. Synthetic food preservatives are now restricted in many developed countries because of their irreversible effects on the body. Therefore, the present study is an important contribution to the search for new beneficial preservatives from plants. The Citrus aurantium plant is widely used by the people of the Relizane region for therapeutic and culinary purposes. The extraction of essential oils from the fruit of this plant by hydro-distillation gave a yield of $0.09 \pm 0.01\%$. The relative density at 20°C , the acid value, the ester value and the saponification value are in the order of 0.69 ± 0.1 , 44 ± 3.0 mg KOH/g oil, 2.75 ± 0.5 mg KOH/g oil and 46.75 ± 5.1 mg KOH/g oil respectively. GC/MS analysis revealed the predominance of linalool ($43 \pm 1.5\%$) followed by limonene ($19 \pm 3\%$). In contrast, no alterations were detected in sample 3 in terms of odour, appearance and colour. A low number of total aerobic mesophilic flora (2×10^4 CFU/g) was recorded in the same sample, followed by sample 2 (4×10^4 CFU/g) and sample 1 (6×10^6 CFU/g). A total absence of Salmonella and Staphylococcus aureus in samples 3 and 2. While sample 1 appeared spoiled due to the presence of a load of 10^4 CFU/g of Salmonella. The Citrus aurantium essential oils appear to be a natural preservative that can be used and incorporated into many perishable food preparations.

Filename: AGR-2024-11-06.pdf

DOI: 10.2478/AGR-2024-0016

Title: ASPECTS CONCERNING THE ECONOMIC EFFICIENCY OF FAMILY DAIRY CATTLE FARMS IN ROMANIA

Author(s): Amalia-Gianina Străteanu¹, Mariana Sandu¹, Lavinia Udrea², Vergina Chirițescu³

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Abstract: The issue of the economic efficiency of family agricultural farms, the dairy cattle farms especially, has become more and more debated over the last few years, as the agricultural and small livestock farms need to be more and more productive in order to adapt to the eternal

needs of the market, to the stronger price competition, the new environmental and socio-economic conditions. The dairy farming sector is strongly influenced by requirements regarding sanitary, ethical, animal welfare standards, and environmental factors in food production, processing, and marketing. The present scientific paper presents fundamental aspects regarding the economic efficiency of family dairy cattle farms breeding and modern development concepts of these farms in Romania's conditions, as a European Union member country. A lot of specialized bibliographic sources have been used, as well as a lot of research reports, government programs for the development of the agricultural sector, feasibility studies, and technical-economic analyses of farms, in order to write this scientific paper.

Filename: AGR-2024-11-07.pdf

DOI: 10.2478/AGR-2024-0017

Title: THE INFLUENCE OF PHYSICAL-CHEMICAL PARAMETERS ON THE SENSORY EVALUATION OF SPARKLING WINES

Author(s): Mihaela Dana Pop

Affiliation(s): Food Consultant

Abstract: Sparkling wines are wines obtained through the second fermentation of still wines, and they contain an overpressure of carbon dioxide formed during this process. Champagne is the most famous sparkling wine in the world, produced exclusively in the Champagne region of France using the bottle fermentation method, also known as the traditional or champenoise method. Another widely known sparkling wine is Prosecco, which is produced in the Treviso region of Italy using the Charmat-Martinotti method of fermentation in pressurized tanks. This article aims to provide an overview of the physico-chemical characteristics of sparkling wines made using the traditional method (such as Cava, Crémant, and Champagne) and some sparkling wines made using the tank method (such as Prosecco and Spumante), and to correlate these characteristics with the tasting notes specific to each type of sparkling wine.

Filename: AGR-2024-11-08.pdf

DOI: 10.2478/AGR-2024-0018

Title: THE EFFECT OF PESTICIDE AND INSECTICIDE USE ON ORCHARD SOILS – A CASE STUDY OF ORCHARDS IN DAMBOVITA COUNTY

Author(s): Anca Irina Gheboianu, Liviu Olteanu

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Abstract: In the early 2000s, the European Commission laid the groundwork for soil protection with a report titled "Towards a Thematic Strategy for Soil Protection" [1]. This report outlined guidelines for preserving and enhancing soil quality. As a result, understanding the levels of heavy metals in soils and their sources became a key priority for the European Union. The main objective of this study is to investigate the effect of pesticide and insecticide use on the soils of the main orchards in Dambovita County. Using WDXRF spectrometry, the elemental concentrations of As, Cd, and Pb were determined in samples collected from 10 points located in the main orchards of Dambovita County. The distribution maps obtained, as well as the comparisons made with the maximum allowable limits of pollutant elements in soils, demonstrated the impact that pesticide and insecticide use can have on soil.

Filename: AGR-2024-11-09.pdf

DOI: 10.2478/AGR-2024-0019

Title: ANALYSIS ON IMPROVING THE PROCESS OF GROWING MEAT CHICKEN IN THE CONTEXT OF PRODUCTION OPTIMIZATION

Author(s): Lavinia Udrea¹, Amalia Gianina Străteanu², Mariana Sandu²

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Abstract: The breeding and management of birds has represented throughout history the main occupation with regard to obtaining as quickly as possible, quantitatively but also qualitatively, valuable animal products high economic. During the study, the technological circuit within the production hall for raising broilers was monitored, in terms of managing microclimate factors in direct correlation with physiological needs of broilers as well as the evolution of hybrids, from the moment of population until reaching the specific marketing age. The proposed objective was to present the advantages of the stage rearing system to the detriment of the classic system, on permanent litter. Although this new model is not very popular among large farms due to the high implementation costs, it offers significant advantages regarding broiler health, microclimate conditions, easier manure disposal operations and shorter time required for preparation. of the rearing rooms until the next population. Ventilation, insulation or heating are the primary parameters regarding the adaptability of the chicks to the exploitation conditions. Neglecting any such factor can jeopardize the smooth running of the activity and can negatively affect biosecurity.

Filename: AGR-2024-11-10.pdf

DOI: 10.2478/AGR-2024-0020

Title: ANALYSIS OF SOME AGROBIOLOGICAL INDICATORS ON THE SEEDS OF SOME CROP SPECIES

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Abstract: In this paper, the seeds of four phyto technical plant species from the harvest of the 2022-2023 agricultural year were analyzed. The studied species were represented by two varieties or two hybrids. The species are the following: wheat (*Triticum aestivum*) with Glosa and Miranda varieties, barley (*Hordeum vulgare*) with Amethyst and Flavia varieties, corn (*Zea mais*) with Pioneer P9537 and Turda 344 hybrids and sunflower (*Helianthus annuus*) with Corsica and Subaru hybrids. The analyzed agrobiological quality indicators were the physical purity of the seeds, the mass of 1000 grains, the hectoliter mass and the germination in laboratory conditions. The results obtained showed that the analyzed parameters fall within the standards in force regarding the quality of seeds and seed material.