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DOI: 10.2478/AGR-2024-0011

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

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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 (Phoenicuculture, 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

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

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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

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

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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

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Title: SENSORY ANALYSIS AND EMOTIONAL RESPONSE OF THE CONSUMER

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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

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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.

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

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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.

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

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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.

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

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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

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

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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

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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.