

Studies on the Activity of Some Biocompounds Relevant in Food and Clinical Domain

Aurelia Magdalena Pisoschi*

Department of Veterinary Medicine, University of Agronomic Sciences and Veterinary Medicine, Bucharest, Romania

*Corresponding author: Aurelia Magdalena Pisoschi, Department of Veterinary Medicine, University of Agronomic Sciences and Veterinary Medicine, Bucharest, Romania, Tel: (33) 493953457; E-mail: aureliamagdalenapisoschi@yahoo.ro

Received date: November 08, 2017; Accepted date: November 09, 2017; Published date: November 20, 2017

Copyright: © 2017 Pisoschi AM. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Editor Note

Researches devoted to the bioactivity of various key metabolites or plant extracts are important in several pathologies, such as degenerative or infectious diseases. This type of researches is published in volume 6 issue 3. Nutritional quality investigation, as well as the minutious evaluation of factors influencing health status, requires the use of different biorecognition elements and the application of techniques based on various detection mechanisms, such as spectrometrical or electrochemical.

Secondary metabolites of *Rosa laevigata* Michaux (polysaccharides, flavonoids, steroids, tannins, laevigatins E, F, G, triterpenoids, 11 α -hydroxytormentonic acid, 2 α -methoxyursolic acid, 6-methoxy- β -glucopyranosyl ester, tormentic acid and 5 α -diol 3-O- β -D-glucopyranoside) were reviewed with respect to their therapeutic potential [1].

Oxidative stress and inflammation attributes of chronic obstructive pulmonary disease. Hence, oxidative stress markers like malonyl dialdehyde and protein carbonyl proved directly correlated with surfactant protein-D in chronic obstructive pulmonary disease [2].

Mineral assay of cucumber cultivated in Rivers State (Nigeria) resulted in highest calcium and magnesium content, whereas cucumber cultivated in Plateau State was characterized by highest potassium, copper, manganese, sodium and zinc content [3].

Saturated hydrocarbons from cuticular wax of *Tactona grandis* L act as physical barrier to micro-organisms and are also endowed with a significant defending potential, exerted against a number of pathogens [4].

Nanoparticles with commercial lactate dehydrogenase originating from rabbit muscle were covalently immobilized on a graphite electrode to develop an amperometric lactate biosensor with very good analytical characteristics, a linear analytical range of 0.001 μ M-45 mM, and validation by application in serum assay [5].

Another study focused on the assay of heavy metals content as correlated to human health risk, via consumption of vegetables from several markets in Bayelsa State, Nigeria. It was concluded that frequent consumption of vegetables from the studied markets could contribute to the heavy metal burden among consumers [6].

Liver dysfunction investigation in diabetic and non-diabetic patients diagnosed with tuberculosis and hospitalized in a Western Cameroon referral hospital, showed high levels of liver enzymes in both types of patients, with no significant differences between the studied groups [7].

In another study, it was proved that dichlorofluoresce in preloaded in mitochondria has the potential to act as viable probe, to assess the effects of calcium ion transport on reactive oxygen species occurrence. The rate of reactive oxygen species generation under steady-state conditions, showed linear correlation with respect to the rate of Ca²⁺-cycling and Ca²⁺-stimulated respiration [8].

The role of L-cysteine was studied during papain-catalyzed oligomerization of lysine, arginine, glutamine and asparagine. It was reported that this sulphur-containing aminoacid promoted oligomer synthesis in a three phase system (n-octane/decafluoropentane/water), as well as in an acetonitrile/water mixture [9].

Extracts obtained from *Aloe pirottae* and *Brassica nigra* proved efficacious in *Anopheles arabiensis* Patton repellency, so it was inferred that these extracts could be used in malaria vector regulation [10].

The relationship between soybean and thyroid health constituted the focus of another study. It was found that isoflavones from soybean exerted no significant influence on thyroid stimulating hormone, triiodothyronine and thyroxine levels of albino rats [11].

The studies published in the present issue are characterized by an excellent quality of biochemical assay and biomedical investigation. The comparative and critical analysis is complemented by high quality presentation.

References

1. Mehboob H, Iqbal M, Ejaz M, Bibi G, Sarwar U, et al. (2017) A Review on Secondary Metabolites of *Rosa laevigata* Michaux: An Important Medicinal Plant. *Biochem Anal Biochem* 6: 326.
2. Pawar RS, Abhang SA (2017) Study of Role of Surfactant Protein-D, Malondialdehyde, Protein Carbonyl and its Correlation with Airflow Obstruction (FEV1% Predicted) in Patients with Smoker Chronic Obstructive Pulmonary Disease (COPD). *Biochem Anal Biochem* 6: 327.
3. Abbey BW, Nwachoko N, Ikiroma GN (2017) Nutritional Value of Cucumber Cultivated in Three Selected States of Nigeria. *Biochem Anal Biochem* 6: 328.
4. Biswas SM, Chakraborty N, Bhowmik PC (2017) Cuticular Wax of *Tactona grandis* L. Leaves – A Resistance Marker against Plant Pathogens. *Biochem Anal Biochem* 6: 330.
5. Narwal V, Dagar K, Pundir CS (2017) Construction of an Amperometric Lactate Biosensor Based on Immobilization of Lactate Dehydrogenase Nanoparticles onto Pencil Graphite Electrode. *Biochem Anal Biochem* 6: 331.
6. Patrick-Iwuanyanwu K, Chioma NC (2017) Evaluation of Heavy Metals Content and Human Health Risk Assessment via Consumption of Vegetables from Selected Markets in Bayelsa State, Nigeria. *Biochem Anal Biochem* 6: 332.
7. Sama LF, Ali IM, Noubom M, Nganou Djinou Ol, Wam EC, et al. (2017) Liver Dysfunction in TB-Diabetic and TB Non-Diabetic Patients Admitted

-
- in TB Referral Hospital in Western Cameroon. *Biochem Anal Biochem* 6: 333.
8. Akopova VO, Kolchinskaya L, Nosar V (2017) The Use of Dichlorofluorescein as a Probe for Monitoring the Effects of Calcium on ROS Production in Mitochondria. *Biochem Anal Biochem* 6: 334.
 9. Srinivasan S, Kapila S, Forciniti D, Nam P (2017) Efficacy of L-Cysteine as an Anti-Oxidant in Papain Catalyzed Synthesis of Oligopeptides in Organic Solvent System. *Biochem Anal Biochem* 6: 335.
 10. Bekele D, Petros B (2017) Repellent Effects of *Aloe pirottae* (Aloaceae) Gel Extract and *Brassica nigra* (Brassicaceae) Essential Oil against the Malaria Vector, *Anopheles arabiensis* Patton (Diptera: Culicidae). *Biochem Anal Biochem* 6: 336.
 11. Nwachoko N, Jack IR (2017) Impact of Soy Bean on Thyroid Hormones of Albino Rats. *Biochem Anal Biochem* 6: 337.