

A Short Note on Pharmacology of *Annona* Species: A 2019 Update

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Abstract

Medicines have been in use ever since the mankind's craze for chemicals drew attention in historic times. The very first use of chemicals was via observation and use of toxins to kill the prey for human himself. Then through series of observations and hit - trial basis man found some medicines from plant source as effective healing moiety. As the times went by, and civilization grew, the man's fascination for drugs and chemicals also went up high. Plant medicines in current age are attracting the minds of scientist and multi-billion dollar research establishments worldwide. Reason being, the drugs and medicines from plants have either No- side effects or have least side effects. This is the reason being for selecting *Annona* species in this paper, as it's still less researched upon and has huge medicinal usage for the betterment of mankind.

Keywords: *Annona* Species; Anticancer Agents; Anti-Oxidants; Plant Medicines; Drug Research

Plant medicines have been in use ever since the man's fascination for plants and chemicals use from them drew his attention in the past historic times. Plant medicines do have advantage over the conventional synthetic sources of drugs. The main reason being is that, Plant medicines, and phytochemicals (Chemicals extracted from plant parts), have either no or least side effects. This is the reason being, that, plant medicines research has attracted huge attention from scholars and researchers across the globe [1].

The plant selected to be written here, is the *Annona* species. *Annona* species are having tall trees, and its fruits are used widely for domestic and commercial purposes. Presently the use of *Annona* species and its fruits have attracted the minds of pharmaceutical scientists, as they have been explored to have the phytochemicals, such as, tannins, coumarins, terpenoids, flavonoids, etc.

Researches have established, Anti-oxidant and Anti-cancer activities in parts and whole plant of *Annona* species. Having anti-oxidant activity is highly interesting and beneficial per se. Reason; the property of having killing of free radicals property can be helpful as all major diseases have free radicals targeting normal cell lines causing cell injury and later a disease [2].

As we know the pathophysiology of a disease (the science which tells how and where the disease occurs), we can readily seek help of finding pharmacology of plant of *Annona* species and can develop targeted lead compounds which can later be formed into drugs or medicines to cure the particular disease [3,4].

Annona species having anti-cancer activity is highly an interesting aspect, as it would have no side effects over the patient and the cancer treatment can be carried out efficiently as well as effectively without bothering about the side effects it possesses for the patient itself [5].

Conclusion

Plant medicines and chemicals extracted from them, known as phytochemicals, are indeed promising lead compounds for drug research. As authors we would like to emphasise that more and more research shall be conducted on plant medicines and they shall be brought under main stream drug research, reason being they have no side effects compared to conventional synthetic compounds.

Conflict of Interest

There doesn't exist any kind of conflict of interest while publishing this manuscript.

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Bibliography

1. World Health Organization. GLOBOCAN 2008: cancer incidence and mortality worldwide. Geneva: World Health Organization (2010).
2. Atawodi SE. "Nigerian foodstuffs with prostate cancer chemopreventive polyphenols". *Infectious Agents and Cancer* 6.2 (2011): S9.
3. Ferlay J, *et al.* "GLOBOCAN 2008 v1.2: Cancer incidence and mortality worldwide: IARC Cancer Base No. 10". Lyon: IARC Press (2010).
4. Latosińska JN and Latosińska M. "Anticancer drug discovery-from serendipity to rational design". In: El-Shemy HA, editor. Drug discovery. Poland: InTech (2013): 35-74.
5. Shukla Y and Pal SK. "Dietary cancer chemoprevention: an overview". *International Journal of Human Genetics* 4.4 (2004): 265-276.

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