PLANT SCIENCE AND ITS NOBLE CONTRIBUTION



This month the scientific community is overwhelmed about the announcement of Nobel Prize in Medicine to the discovery of RNAi technique, which has revolutionized the way researchers have adopted to silence genes. Further refinement and understanding of this technique will pave way for novel category of therapeutics in future. I am delighted to share with our readers that much before RNA interference was well characterized, the phenomenon was well known in plant genetics to reduce gene expression and was referred as post transcriptional gene silencing, transgene silencing and quelling. Single-stranded antisense RNA was introduced into plant cells and hybridized to the homologous single-stranded "sense" messenger RNA and the

resulting dsRNA is responsible for reducing gene expression. RNA interference is distinct from other gene-silencing phenomena in that the RNAi based gene silencing is inheritable from cell to cell in plants, worms and as well as in eukaryotes. Hence, I would not be wrong in mentioning that plant base research work has continued to contribute directly or indirectly to the development of medical sciences and hope and trust such fundamental work in plants is also recognized by the Nobel foundation some day.

One of the major hindrances in the development of most developing and underdeveloped countries is the population explosion. Although several allopathic contraceptive pills are available, many affordable and safe alternatives are intensively investigated and the Mother Nature is at the forefront with a solution. Compiling the herbal options for contraception, Qureshi et al., systematically review the plants with anti-fertility activity in the current issue.

Refinement in Natural Product research needs time tested and robust purification/quantification procedures and HPTLC is one such technology gaining increasing utility in Pharmacognosy research. Adopting this technology Patel et al., report the utility of HPTLC for estimation of Charantin, which is phytoconstituent present in *Momordica charantia*, possessing hypoglycemic activity. The reported assay would be an important tool in the quality control of antidiabetic polyherbal formulations consisting of Charantin. Also reported in this issue is the "hypoglycemic and antihyperglycemic effect of alcoholic extract of *Euphorbia leucophylla*" by Satyanarayana et al. Incidence of diabetes is on constant rise globally and so are the associated complications. Hence search for phytoconstituents with antidiabetic activity and their evaluations techniques are timely and need of the hour.

Pain and inflammatory disease are yet another therapeutic area wherein natural product research has continued to contribute effective drugs. In the current issue, Ghule et al., Dorni et al., and Omkar et al., report anti-inflammatory activity of *Lagenaria siceraria* fruit juice extract, *Plumbago capensis*, *Nyctanthes arbortristis* and *Onosma echioides* respectively.

The Editorial team of Phoog Mag is indeed delighted to bring in these fascinating and interesting sciences to its readers and we hope you do enjoy reading this issue. We are open to your suggestions, comments and critic.

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PHCOG MAG.: Peer review Process

Pharmacognosy Magazine - (ISSN 0973-1296: PHCOG MAG.) is a quarterly publication of Phcog.Net, the first issue was released on January 1st, 2005 (for more details: www.phcogmag.com). PHCOG MAG. (An Official Publication of Phcog.Net) is an open access publication series of Phcog.Net, which comprises of contributions to Medicinal Plant research with special reference to Phcog.Net and certain aspects of information with prior knowledge of editorial board. It publishes Special Article FOCUS (App. 5000 words), Short reviews (App. 3000 words), Clinical reports on a Plant (App. 2000 words), Recent advances in Assay methods and techniques (App. 5000 -6000 words), Plant review (App. 1000 words) and Research articles. All submitted articles are subjected to peer review. Phcog Mag being subjected to indexing in different databases, contributions and manuscripts with high quality of scientific content and language submitted exclusively to PHCOG MAG. would undergo possible reviewing. Manuscripts not meeting the scientific standards will not be considered for the reviewing process. Editors will be asking referees to advice on

the scientific merit as well as the likely appeal the paper will have for broad Natural Product researcher's readership. Editors usually give reviewers 21 days to complete their review process. Although editors always hope for a quick turnaround, this is not always possible. However, editors will be in contact with the referees once paper is sent to them, with weekly reminders of their due date. Once all the reviews are in-house, the Editor handling the manuscript will most likely make a decision within a day or two. The editor will then contact the corresponding author with the decision. The entire review process of the articles submitted to PHCOG MAG is done online and digitally. Reviewers invest precious time in the belief that they are making important contributions to the scientific process. Author's criticism or negative comments on reviewer's comments will be subjected to the cancellation of publication.

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