Ayurvedic knowledge as the basis for selection of medicinal plants for tackling modern day diseases



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Ayurvedic knowledge as the basis for selection of medicinal plants for tackling modern day diseases

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Ayurveda, the system of traditional medicine native to India (since ~1000 B.C.) is practiced globally as a form of complementary and alternative medicine (Shukla et al., 2013, Mol. Biol. Rep. 40, 3255–3262). Plant-based drugs (Audbhid) find an important place in Ayurveda. The complexity that needs to be tackled is that many of the modern day diseases need to be correlated to Ayurveda based on their symptoms mentioned in Ayurveda since they were described by different names in ancient Ayurvedic texts (Shukla 2013, INSA Ayurvedic Biology Symposium Lecture, pg 44-45). One such example is that of cancer and its remedies mentioned in Ayurveda (Katiyar et al., 2012, AYU 33, 10-19). Three disease conditions mentioned in Ayurveda possibly correlate with modern day description of cancer. These are namely, Arbuda, Granthi and Gulma. Logically, plants recommended for curing these three would have higher probability of hit rates in anti-cancer drug discovery. Fifty three herbs have been found to be described in Ayurveda to cure these disease states and they shared tikta-katu rasa, laghuruksha-tikshna attributes (Gunas), katu vipaka, ushna virya and kapha-vata shamana (Katiyar et al., 2012, AYU 33, 10-19). Further second round screening of Ayurvedic texts to enumerate other herbs having these specific properties led to identification of thirteen more plant species having potential anti-

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preventive / curative disease management and these selected plants may also possess alternative therapeutic properties apart from anticancer activity. This approach described by Katiyar et al. could be used to pinpoint medicinal plant remedies for other modern day diseases too. This traditional-modern synergistic approach could effectively increase the pace of new drug discovery. This presentation would discuss this funnel approach for selection of medicinal plants as remedies for modern day diseases based on traditional knowledge.

cancer activity. However, it must be kept in mind that Ayurveda follows a holistic approach for