

## Misleading “non-rasayanas”

Dear Editor,

The idea of “non-rasayanas” put forward by Gaurav Mahesh Doshi and co-authors<sup>[1]</sup> does not exist in Ayurveda at the first instance. Though, in science, it is always welcome to generate new ideas, concepts, and terminologies, one must take sufficient care while conceptualizing them. Authors must define the scope of new concept/word with adequate clarity, supported by evidence. The concept/word “non-rasayana” proposed by them is very immature and not substantiated with evidences in the article. The theoretical background to consider an herb as non-rasayana has not been mentioned anywhere in the article. However, it appears that the authors are targeting exploration of herbs not described as rasayana in Ayurveda, but have a potential to bring about immunomodulation as non-rasayana. Such a translation looks to be baseless and will mislead researchers and Ayur philosophers, which ultimately is a gross disservice to the age-old medical system. Ayurveda ascribes multifold rejuvenating functions with rasayana, including tissue promoting (dhatu vardhana), complexion promoting (varnya), physical strength (balya), aphrodisiac (vrishya), voice promoting (swarya), vision promoting (chakshushya), etc., apart from immune functions (vyadhikhamatva). While describing “rasayana,” authors restrict to plants, which is only one way of achieving rasayana,<sup>[2,3]</sup> whereas rasayana is a much wider concept of Ayurveda, involving daily regimens with righteous conduct. Ayurveda has indicated that daily regimens helping to achieve rasayana include daily consumption of milk and milk products (ksheera-ghrta sevana) and regular exercise, which is optimum and suitable to the individual. With this, a righteous conduct like truthfulness, obeying the rules of society, respecting the elders and learned are also indicated to be important components of rasayana, which invariably take care of mental health.<sup>[2]</sup> Since rasayana is a concept developed with Ayurveda epistemology, a concept of non-rasayana (if at all constructed) must have its logic originating from Ayurveda philosophy (it may be supported by modern science as needed), without which there is no meaning and value to the word non-rasayana. Thus, correlating the non-rasayana plants to mere immunomodulation is not of any benefit to Ayurveda or life sciences.

It is not clear how and why the authors categorized the drugs *Centella asiatica* and *Clitoria ternatia* as non-rasayanas. In fact, Ayurveda considers both of them as superior medhya rasayana (rasayana herbs primarily focused for intellect promotion). Caraka Samhita makes a special mention of four herbs (Mandukaparni, Yashtimadhu, Guduchi, and Shankhapushpi) in a chapter on rasayanas. One must note that classical Ayurvedic literature tags them with the word “rasayana.”<sup>[2]</sup> *Celastrus paniculatus* is also an excellent medhya rasayana.<sup>[4]</sup> *Bombax malabarica* (Shalmali) is also called as a

rasayana by a popular, commonly referred lexicon, Kaiyyadeva Nighantu.<sup>[5]</sup> Apart from these, though several herbs like *Saraca indica*, *Cuminum cyminum*, and *Berberis aristata* have not been directly referred to be rasayana, yet the properties attributed to them and their clinical indications imply that they have tremendous rasayana potential, and they are contemporarily used for the same purpose also.<sup>[4,6]</sup> It is unacceptable to brand them as non-rasayanas. Rather these herbs are not proven for their immunomodulatory activity. On what basis do they categorize plants as non-rasayanas? It is also surprising that several important rasayana herbs like *Eclipta alba*, *Tribulus terrestris*, etc., have not appeared in the rasayana list. So, the list is not exhaustive, but not stated so by the authors.

It is also disappointing to see the errors with respect to plant identification in a paper published in *Pharmacognosy reviews*. *Ipomoea digitata* is not ajwayan, but ksheeravidari; *Butea superb* is not palak, but palash; *Mangifera indica* is not amla, but amra (mango). Several botanical names have been wrongly written. *Bacopa monerri*, *Embllica ribes*, *Leptademia reticulata*, *Solanum nigram*, *Dioscoca bulbifera*, *Terminalia belirica*, *Terminalia chebulica*, *Albizzia lebbeck*, *Clitoria ternatia*, *Holarrhena antidysentrica*, *Piper betel*, *Pluchea lanceolate*, *Nardostychnus jatamansi*, *Picrorhiza kurao*, and *Cymbopogon maritini* are a few to mention; they must be written as *Bacopa monnieri*, *Embelia ribes*, *Leptadenia reticulata*, *Solanum nigrum*, *Dioscorea bulbifera*, *Terminalia bellirica*, *Terminalia chebula*, *Albizzia lebbeck*, *Clitoria ternatea*, *Holarrhena antidysenterica*, *Piper betle*, *Pluchea lanceolata*, *Nardostachys jatamansi*, *Picrorhiza kurroa*, and *Cymbopogon martini*, respectively.

Figure 1 is conveying partial and wrong information to the reader. Rasayanas are not only linked with four to five activities as mentioned in this figure. The relevance of Figure 2 in this paper is not clear since the contents have not been brought to any kind of discussion.

Apart from contradicting the unscientific and unclear concept of non-rasayana, especially with the limited information provided by the authors on methodology and logic, we urge the authors and the journal to take sufficient care on the authenticity and clarity of the information and flawless botanical identity in the articles published. Obviously the article has not passed through a good peer-review system.

**Subrahmanya Kumar Kukkupuni,  
Venugopalan Somavilasome Narayanan<sup>1</sup>**

Centre for Pharmacognosy, Pharmaceutics and Pharmacology,  
<sup>1</sup>ISM Informatics and Theoretical Foundations, Foundation for  
Revitalisation of Local Health Traditions, Bangalore,  
Karnataka, India