

roduced species will become invasive and when. Parties to the Convention on Biological Diversity⁵ and other international bodies have recognized the urgent need for risk-analysis frameworks that will better enable prevention and management of this problem.

Effective protection of locally endangered plants will involve a few simple steps. Educators at all levels tend to use animal examples to teach basic biological concepts, whether in the classroom, laboratory or field condition. It is important to use botanical means of connecting animals in the biosphere when teaching students at all levels. The inability to perceive plants in our environment leads to failure in understanding the significance of plants in our daily life. Thus, we miss out on the aesthetic and biological features of plants. There is a mistaken notion that plants are unworthy of any

significant consideration. Children should be given the opportunity to grow plants, and appreciate plant life and to realize that human life depends on plants. Plant conservation projects can be initiated in villages, towns and cities to protect native plants; local 'plant protection' societies/clubs could promote public awareness. Public lands that harbour rare local herbs, climbers and trees need to be protected and invasive species need to be eliminated. Exact estimates of economic damage caused by invasive plants are not available for India. So future research can be focused on this aspect. Research to monitor the population status, distribution and ecology of rare/endangered plants needs to be conducted thoroughly throughout India. In this way, appropriate mitigation measures to stop local extinction as well as to extend legal protection to plants can be implemented in the near future.

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NEWS

Emergence of the tenth planet

After a prolonged debate and suspense, Pluto was accepted as the ninth planet orbiting around the sun^{1,2}. One of the major difficulties in the recognition of Pluto as the ninth planet going round the sun was its non-concentric orbit that did not conform to the general trend of elliptical motion of the eight planets discovered earlier, as shown in Figure 1. Scientific efforts for exploring the Kuiper belt continued and two more objects, 2005FY9 and 2003EL61, of somewhat smaller sizes were found. The recently discovered third object, known as KBO 2003UB313, is larger in size compared to earlier discov-

ered nonconcentric planets³. A debate of the International Astronomical Union (IAU) was scheduled to be held on 24 August 2006 for taking appropriate decision about non-concentric orbits of planets. We sent our proposal by 11 August 2006 for reclassification: eight planets to be placed in the first category and Pluto to be placed in a separate category along with 2003 UB313, the fourth non-concentric planet. We also suggested new names based on historical developments of Indian ancient astronomy as 'Aryabhata' or 'Vivekananda'. In the meeting on 24 August 2006, a decision was taken in con-

formity with our suggestions, to a large extent⁴. The two smaller objects, namely 2005FY9 and 2003EL61, were not included and the remaining two non-concentric planets, Pluto and 2003UB313, were taken in a separate category of dwarf planets along with Ceres. The General Assembly named object 2003UB313 as Eris and its moon as Dysnomia. Considering the importance of 2003UB313, details were investigated and it was even named as the tenth planet.

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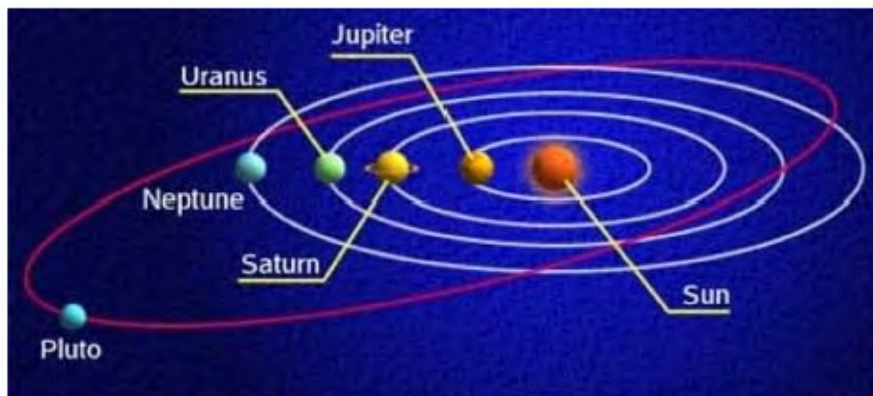


Figure 1. Pluto's non-planar orbit intersecting the orbits of planets.