



## ***Gardneria* and *Spigelia* (Loganiaceae), two genera new to the Flora of Peninsular Malaysia**

AVELINAH JULIUS<sup>1</sup>, IMIN KAMIN<sup>1</sup>, RUTH KIEW<sup>1</sup> & TIMOTHY M.A. UTTERIDGE<sup>2</sup>

<sup>1</sup>Forest Research Institute Malaysia, 52109 Kepong, Malaysia

<sup>2</sup>Herbarium, Library, Art and Archives, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AE, U.K.; e-mail: [t.utteridge@kew.org](mailto:t.utteridge@kew.org)

### **Abstract**

The genera *Gardneria* and *Spigelia* with the discovery of *G. ovata* from Fraser's Hill, Pahang, and the tropical American weed, *S. anthelmia* from Selangor, respectively, are new records for the Flora of Peninsular Malaysia. A full description and taxonomic notes for *G. ovata* and *S. anthelmia* in Peninsular Malaysia are presented, and the conservation status is provided for the former species. In addition, the two species are illustrated with colour photographs. An updated generic key for the Flora is provided following the APG III concept of the Loganiaceae.

**Key words:** Conservation, Flora Malesiana, Malesia, new generic records, taxonomy

### **Introduction**

The Flora of Peninsular Malaysia (FPM) project was launched in 2005 (Kiew & Rafidah 2007, Saw & Chung 2007). Under this project, an extensive collecting programme has been carried out throughout the Flora area. In spite of Peninsular Malaysia being one of the best collected regions within the Flora Malesiana area (Middleton 2003: Fig. 1) and many families having been revised as part of the Flora Malesiana project [Loganiaceae were revised by Leenhouts (1962b) with addenda etc. by Leenhouts (1972)], new species and records continue to be reported from Peninsular Malaysia. A recent collecting trip to Fraser's Hill, Pahang, a popular hill resort in the Main Range, led to the discovery and collection of *Gardneria ovata* Wall. in Roxburgh (1820: 400), a scrambling shrub, previously unknown from Malaysia, and in Selangor the tropical American weed, *Spigelia anthelmia* Linnaeus (1753: 149) was discovered growing in waste ground. Both are members of the Loganiaceae. Their status as new records is confirmed by their omission from the recent, comprehensive checklist of Peninsular Malaysia's flora (Turner 1996) and, in the case of *G. ovata* from the recent detailed account of the seed plant flora of Fraser's Hill (Kiew 1998) and for *S. anthelmia* from the inventory of the most recent additions to the weed flora (Kiew 2009). In addition, a search in appropriate herbaria (BO, K, KEP, KLU, L, SAN and SING) confirmed that no other collections of both from Malaysia had been made prior to our collections.

It should be noted that prior to the establishment of the political entity 'Malaysia' [a combination of Malaya (now called Peninsular Malaysia), Sabah (formerly British North Borneo) and Sarawak] into one nation, the phytogeographical region now called Malesia was then called 'Malaysia'. Hence, the earlier volumes of Flora Malesiana, including the one that includes the Loganiaceae (Leenhouts 1962b), in recording geographic distribution, use Malaysia for Malesia. This is quite clear when Leenhouts gives the distribution for *G. ovata* as "Malaysia: N. Sumatra (Tapanuli) and W. Java (Preanger: Tjadas Malang)" and for *S. anthelmia* as "Malaysia: Sumatra, Java (mainly West and Central) and Lesser Sunda Is. (Sumba)" that in both cases neither species was at that time known from Peninsular Malaysia. However, in the Flora of China (FoC) (Li & Gilbert in Li & Leeuwenberg 1996) and the Flora of Thailand (FoT) (Griffin & Parnell 1997) accounts,