Phlox is a genus of 67 species of perennial and annual plants in the family Polemoniaceae. Phlox are popular ornamental plants, and traditionally used to treat aches, colds, anemia, diarrhoea and eczema. During a survey at the Indian Agricultural Research Institute Campus, New Delhi, from 2010 to 2011, symptoms including extensive yellowing and stunting, proliferation of shoots, little leaves and reduced size of flowers were observed in approximately 17% of plants of *Phlox drummondii* (Fig. 1). To investigate the possibility of a phytoplasma association with the symptoms, total DNA was isolated from leaf midribs and stems of three different infected plants. Healthy-looking plants without symptoms were also collected to use as a negative control using the phytoplasma enrichment procedure (Ahrens & Seemüller, 1992). The DNA isolated from periwinkle infected with *Phytoplasma phoenicium* (group 16SrI), *Pigeon pea witches’ broom* phytoplasma; Azadvar *et al.*, 2009) and maintained in greenhouse was used as positive control. Total DNA was used as a template for nested PCR using universal primers that target the phytoplasma 16S rRNA gene: P1/P7 (Deng & Hiruki, 1991; Schneider *et al.*, 1995) and R16F2/R16R2 (Gundersen & Lee, 1996). Expected size amplicons of ~1.8 kb and ~1.2 kb, respectively, were amplified from all the three symptomatic *P. drummondii* plants (Fig. 2). However, no PCR products were obtained from the healthy-looking plant samples. The amplicon of ~1.2 kb was sequenced from a representative sample, and the consensus sequence obtained was submitted to GenBank (Accession No. KC178678). BLAST analysis of the partial 16S rDNA sequence of the *P. drummondii* phytoplasma revealed the highest sequence identity (99%) with that of phytoplasma members of group 16SrIX, ‘*Candidatus Phytoplasma phoenicium*’, the former *Pigeon pea witches’ broom* group. Phylogenetic analysis (MEGA version 4.0, USA) confirmed the closest phylogenetic relationship of the *P. drummondii* phytoplasma 16S rDNA sequence with those of phytoplasma members of group 16SrIX, ‘*Candidatus Phytoplasma asteris*‘ subgroup M (16SrI-M) have been previously associated with *P. drummondii* in Lithuania (Samuštiene *et al.*, 2007). However, this is the first world report of the association of the 16SrIX group with a phytoplasma disease on *P. drummondii*.

**Acknowledgements**

The first author is thankful to Department of Science and Technology, New Delhi, India for providing financial assistance under WOS ‘A’ scheme. The authors wish to express sincere thanks to Head, Division of Plant Pathology and Director, Indian Agricultural Research Institute for providing laboratory facilities.

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http://dx.doi.org/10.1094/Phyto-82-828


http://dx.doi.org/10.1016/0167-7012(91)90007-D

