

**NORTH CAROLINA AGRICULTURAL RESEARCH SERVICE**

**NORTH CAROLINA STATE UNIVERSITY**

**RALEIGH, NORTH CAROLINA**

**NOTICE OF RELEASE OF BUDDLEJA NC2011-4 (proposed name, 'MISS PEARL')**

*Buddleja* NC2011-4 was derived from a summer 2009 hybridization of 'Ice Chip' (NCSU cultivar tested as NC2006-10, USPP 24,015) x Miss Molly (NCSU cultivar tested as NC2005-8, USPP 23,425). The attractive white flower color, ruffled flowers, semi-upright stature, compact growth habit, dense foliage, and lack of seed formation are the primary reasons for release.

The pedigree of NC2011-4 is shown in Figure 1. All hybridizations shown in the pedigree were performed in the author's breeding program, except for the development of 'White Ball'. Seeds were germinated in January 2010 and about 95 progeny were grown out in summer 2010 at the Sandhills Research Station, Jackson Springs, NC. One seedling, designated NC2011-4, demonstrated compact growth habit, semi-upright stature, dense foliage and branching, lack of seed set, and white ruffled flowers. 'Miss Pearl' was tested with other selections and check cultivars in an advanced selection trial established on April 13, 2013 in a fumigated trial site at the Sandhills Research Station. In this trial, unpruned plants of 'Miss Pearl' attained a height and spread of 114.2 and 148.2 cm, respectively (height/width ratio = 0.77), in the second year of growth (measured October 7, 2014, two full growing seasons after establishment) compared to a standard check cultivar, 'Potter's Purple', which attained a height and width of 199.5 and 270.9 cm, respectively.

'Miss Pearl' is judged as compact compared to standard cultivars. The dense, compact growth habit of 'Miss Pearl' is similar to that shown by the three previous "Miss" releases from the breeding program, 'Miss Ruby' (pink), 'Miss Violet' (violet) and 'Miss Molly' (red). Hence, 'Miss Pearl' will expand the color range in this popular series.

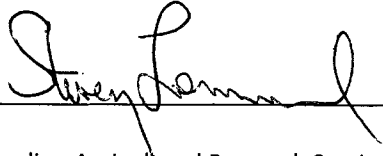
Based on observations of female sterility, NC2011-4 will be submitted to the Oregon Department of Agriculture (ODA) for consideration for production, marketing, and landscape use in the state of Oregon. Oregon currently bans all uses of butterfly bush because of its demonstrated invasiveness in the state. The inflorescences are typical of *Buddleja*, and individual flowers are very fragrant. Foliage of NC2011-4 is deciduous.

Plants of 'Miss Pearl' have been tested in North Carolina (Jackson Springs, USDA hardiness zone 7b), and Michigan (Grand Haven, USDA hardiness zone 5b). All have demonstrated reliable cold hardiness for four winters in the Michigan trial, and four winters in the North Carolina test site. In the Michigan trial, plants died back to the ground (typical of butterfly bush in USDA hardiness zone 5a), but resumed growth from the crown the following spring. In North Carolina, above ground shoots survived over winter, hence plants may require occasional moderate pruning to maintain the desired compact growth.

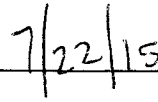
Cultural requirements of 'Miss Pearl' are similar to other cultivars of *Buddleja*, most critically, full sun exposure and well-drained soil. The compact growth habit, semi-upright stature, prolific flowering, and reduced female fertility of NC2011-4 are highly desirable traits that will allow this selection to be used in a wide range of landscape situations.

Propagation of 'Miss Pearl' can be achieved successfully by using softwood cuttings taken any time in the growing season, treating with low to moderate rates of indole-3-butyric acid (IBA), and placing under intermittent mist. Rooting usually occurs within 2 weeks.

A U.S. plant patent application will be submitted for 'Miss Pearl'. Plant patent rights will be assigned to NCSU. Propagation and marketing rights will be assigned to Spring Meadow Nursery, Grand Haven, MI. Spring Meadow Nursery, the exclusive licensee for the NCSU *Buddleja* introductions has production and marketing rights; they have initiated plans to include this cultivar in their 2016 catalog.



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Director, North Carolina Agricultural Research Service



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Date

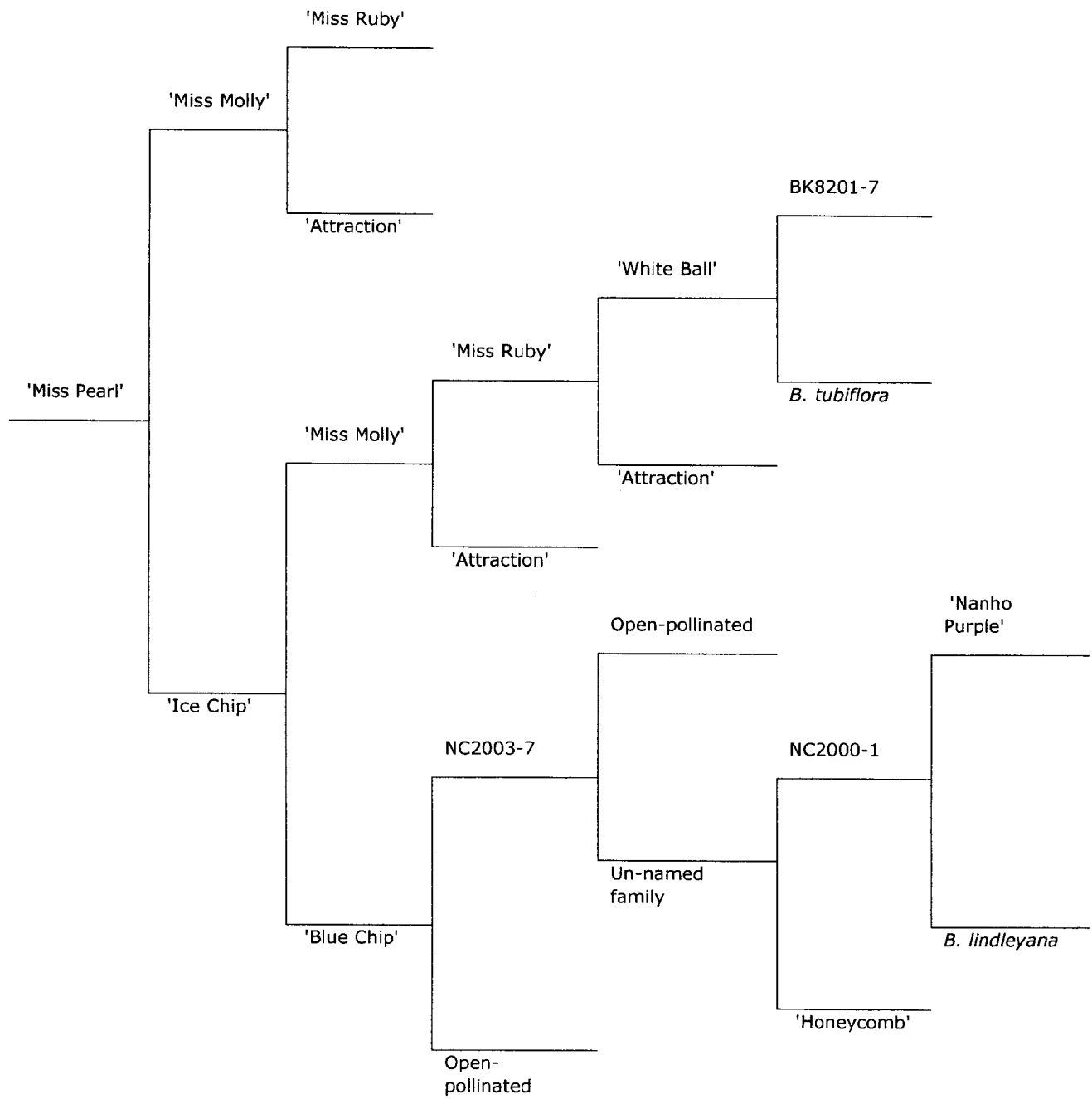


Figure 1. Pedigree of *Buddleja* 'Miss Pearl'.