New Plant Product Combinations
Adding Value to Container Nursery Stock

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Nature of Work: Nursery crops are often sold as impulse items identified by their color (i.e. flowers, leaves or bark) or for their unique growth habit or form (contorted or weeping types). Other plants are purchased for a specific use or need. Nowhere in the nursery trade do we offer a combination or single package of plants to serve multiple uses or act as a design element in the landscape. The objective of this study is to produce plant combinations in the same container and determine customer acceptance of the end product. Many new plants were introduced and evaluated as container combinations. This venue may provide an excellent way to introduce new crops to the end consumer.

Seven gallon pots were planted with several different plant combinations. Combinations were planted that combine an upright tree or shrub element and a lower ground cover running over the pot surface. Other combinations included plants of similar growth habit that could grow together with intermingled branches, flowers, leaves and fruit. Listed in Table 1 are this years combinations.

<table>
<thead>
<tr>
<th>Major Plant</th>
<th>Minor Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bambusa multiplex ‘Rivieriorum’</td>
<td>Carex marrowii ‘Ice Dance’</td>
</tr>
<tr>
<td>Buddleia ‘Attraction’</td>
<td>Train to tree form</td>
</tr>
<tr>
<td>Clethra alnifolia ‘Sixteen Candles’</td>
<td>Acorus graminus ‘Miniature Gold’</td>
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<tr>
<td>Clethra alnifolia ‘Sixteen Candles’</td>
<td>Carex marrowii ‘Ice Dance’</td>
</tr>
<tr>
<td>Clethra alnifolia ‘Sixteen Candles’</td>
<td>Saxifraga stolonifera ‘Fred Galle’</td>
</tr>
<tr>
<td>Cryptomeria japonica ‘Globosa Nana’</td>
<td>Carex marrowii ‘Ice Dance’</td>
</tr>
<tr>
<td>Daphniphyllum macropodom</td>
<td>Acorus graminous ‘Miniature Gold’</td>
</tr>
<tr>
<td>Ensete ventricosum (Red Banana)</td>
<td>Acorus gramineus ‘Variegatus’ &amp;</td>
</tr>
<tr>
<td></td>
<td>Ophiopogon planiscapus ‘Nigrescens’</td>
</tr>
<tr>
<td>Ensete ventricosum (Red Banana)</td>
<td>Mazus reptans &amp; Ophiopogon planiscapus ‘Nigrescens’</td>
</tr>
<tr>
<td>Plant Name</td>
<td>Additional Plants</td>
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<tr>
<td>----------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><em>Ensete ventricosum</em> (Red Banana)</td>
<td><em>Pratia pedunculata &amp; Ophiopogon planiscapus ‘Nigrescens’</em></td>
</tr>
<tr>
<td><em>Gardenia angusta</em> ‘Variegata’</td>
<td><em>Acorus gramineus</em> ‘Miniature Gold’</td>
</tr>
<tr>
<td><em>Gardenia angusta</em> ‘Variegata’</td>
<td><em>Pratia pedunculata</em></td>
</tr>
<tr>
<td><em>Hydrangea paniculata</em> ‘Chantilly Lace’ TREE FORM</td>
<td><em>Ruellia brittoniana</em> ‘Katie Pink’</td>
</tr>
<tr>
<td><em>Hydrangea paniculata</em> ‘Chantilly Lace’ TREE FORM</td>
<td><em>Mazus reptans</em> ‘Albus’</td>
</tr>
<tr>
<td><em>Hydrangea paniculata</em> ‘Chantilly Lace’ TREE FORM</td>
<td><em>Trachelospermum asiaticum</em> ‘Oblanceolatum’</td>
</tr>
<tr>
<td><em>Hydrangea paniculata</em> ‘Chantilly Lace’ TREE FORM</td>
<td><em>Saxifraga stolonifera</em> ‘Fred Galle’</td>
</tr>
<tr>
<td><em>Hydrangea paniculata</em> ‘Chantilly Lace’ TREE FORM</td>
<td><em>Ranunculus repens</em> ‘Buttered Popcorn’</td>
</tr>
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<td><em>Hydrangea paniculata</em> ‘Chantilly Lace’ TREE FORM</td>
<td><em>Ranunculus repens</em> ‘Buttered Popcorn’</td>
</tr>
<tr>
<td><em>Ilex crenata</em> ‘Sky Pencil’</td>
<td><em>Acorus gramineus</em> ‘Variegatus’</td>
</tr>
<tr>
<td><em>Ilex crenata</em> ‘Sky Pencil’</td>
<td><em>Cut Back</em></td>
</tr>
<tr>
<td><em>Ilex crenata</em> ‘Sky Pencil’</td>
<td><em>Sedum spurium</em> ‘Tricolor’</td>
</tr>
<tr>
<td><em>Ilex crenata</em> ‘Sky Pencil’</td>
<td><em>Carex marrowii</em> ‘Ice Dance’</td>
</tr>
<tr>
<td><em>Illicium henryi</em></td>
<td><em>Acorus gramineus</em> ‘Variegatus’</td>
</tr>
<tr>
<td><em>Illicium henryi</em></td>
<td><em>Saxifraga stolonifera</em> ‘Harvest Moon’</td>
</tr>
<tr>
<td><em>Lagerstromea fauriei</em> ‘Fantasy’</td>
<td><em>Sedum spurium</em> ‘Tricolor’ &amp; <em>Ophiopogon planiscapus</em> ‘Nigrescens’</td>
</tr>
<tr>
<td><em>Lagerstromea fauriei</em> ‘Fantasy’</td>
<td><em>Clematis</em></td>
</tr>
<tr>
<td><em>Loropetalum chinense rubrum</em> ‘Sizzlin Pink’</td>
<td><em>Abelia</em> ‘Canyon Creek’</td>
</tr>
<tr>
<td><em>Melia azedarach</em> ‘Jade Snowflake’</td>
<td><em>Acorus graminous</em> ‘Miniature Gold’ &amp; <em>Rubus calycinoides</em></td>
</tr>
<tr>
<td><em>Melia azedarach</em> ‘Jade Snowflake’</td>
<td><em>Lysimachia nummularia</em> ‘Aurea’ &amp; <em>Ophiopogon planiscapus</em> ‘Nigrescens’</td>
</tr>
<tr>
<td><em>Thuja occidentalis</em> ‘Golden Globe’</td>
<td><em>Acorus gramineus</em> ‘Variegatus’</td>
</tr>
</tbody>
</table>
The combinations were potted in mid April 2003 and maintained under nursery conditions. All were in full sun except the Ensete, Illicium, and Thujopsis.

Combinations were evaluated by the public at the UGA Horticulture Open House on September 26, 2003. The combination selected for evaluation are listed in Table 2 in the order used in Figures 1-3.

<table>
<thead>
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<th>Major Plant</th>
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<tr>
<td>Clethra alnifolia ‘Sixteen Candles’</td>
<td>Carex marrowii ‘Ice Dance’</td>
</tr>
<tr>
<td>Viburnum cinnamomifolium</td>
<td>Tradescantia ‘Katie’</td>
</tr>
<tr>
<td>Camellia sasanqua ‘Pink Snow”</td>
<td>Aucuba japonica ‘Variegata’</td>
</tr>
<tr>
<td>Vitex ‘Salina’s Pink’</td>
<td>Tradescantia ‘Concord Grape’</td>
</tr>
<tr>
<td>Loropetalum chinense rubrum ‘Sizzlin Pink’</td>
<td>Abelia × grandiflora</td>
</tr>
<tr>
<td>Loropetalum chinense rubrum ‘Sizzlin Pink’</td>
<td>Abelia × ‘Canyon Creek’</td>
</tr>
<tr>
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<td>Acorus gramineus ‘Variegatus’</td>
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Table 2. Combinations evaluated at the UGA Horticulture Open House on Sept. 26, 2003
<table>
<thead>
<tr>
<th>Thuja occidentalis ‘Degroot’s Spire’</th>
<th>Acorus gramineus ‘Variegatus’ &amp; A. graminus ‘Miniature Gold’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thuja occidentalis ‘Degroot’s Spire’</td>
<td>Ruellia brittoniana ‘Katie Pink’</td>
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<td>Cryptomeria japonica ‘Globosa Nana’</td>
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**Results and Discussion:** Plants have been growing together for one season. A reasonable amount of growth has been produced. More than 100 individuals evaluated these twelve combinations. The gardeners were more interested and more likely to purchase the combinations than the nurserymen, landscapers or landscape designers.

Figure 1 shows the evaluations of the first four combination from the list. The group was asked to evaluate the combinations as to 1) their interest, 2) the acceptability of the combination, 3) would they buy the combination or 4) would they maybe buy the combination. The Sixteen Candles Clethra and Cinnamon-leaf Viburnum combination had 80-90% interested and acceptable. 35-40 % would buy with 35% maybe would buy both combinations.

In Figure 2, all four combination had 80-100 % interested and acceptable. Sixty percent would buy the Improved LoraBelia (*Loropetalum chinense rubrum* ‘Sizzlin Pink’ with *Abelia* × ‘Canyon Creek’) and 35% maybe would buy. That means 95% would consider purchasing these combinations.

In Figure 3, the ‘Jade Snowflake’ Chinaberry, banana and Cryptomeria combinations were well received. These results strongly suggest the gardening public is receptive to these combination plantings. Figure 4 gives the overview of all the participant for all combinations. Just under 80% found the combinations of interest and acceptable. Forty-five percent would buy with over 25% maybe would buy combination plantings.

**Significance to the Industry:** We are always looking for new ways to market our plants. I think there is an opportunity for the smaller speciality grower to expand his pallette of offerings by growing combination plantings. Combination plantings could also be provided by more traditional growers to add new speciality products. I think these types of products fill the same nitch as topiary Junipers and trellised Camellias. They are a premium product that uses uncommon plants to appeal to impulse purchasing. Combination plantings are not for everyone but they could provide new specialities for some growers.
Figure 1. Evaluation of Combination Plantings (Group 1) by Interested Gardeners

![Bar chart showing the evaluation of Clethra, Viburnum, Sasanqu, and Vitex by interested gardeners. The chart uses colors to denote interest, acceptable, buy yes, and buy maybe responses.]

Figure 2. Evaluation of Combination Plantings (Group 2) by Interested Gardeners

![Bar chart showing the evaluation of Lora Belia Orig, Lora Belia Imp, Gold Thuja, and Degroot Thuja by interested gardeners. The chart uses colors to denote interest, acceptable, buy yes, and buy maybe responses.]

Figure 3. Evaluation of Combination Plantings (Group 3) by Interested Gardeners

Figure 4. Evaluation of All Combination Plantings by All Participants