Breeding new, sterile and non-invasive *Ruellia* (Mexican Petunia) cultivars

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**Objective:**
- To breed sterile cultivars of *Ruellia* (Mexican Petunia) that are not invasive by seed dispersal, in a range of flower colors and growth habits.

**Our approach:**
- Collect *Ruellia* germplasm from multiple sources.
- Conduct interspecific hybridizations.
- Use mitotic inhibitors on diploid germplasm to obtain tetraploids, and then hybridize these to the original diploids to obtain triploids, which are usually sterile.
- Make initial selections in the greenhouse.
- Conduct replicated, multi-location field and greenhouse trials in the summer to evaluate growth habit, flowering and fruiting.
- Release selections as new cultivars through the UF/IFAS Cultivar Release Committee and the Invasive Plants Task Force.
- So far, *Ruellia simplex* ‘Mayan Purple’ (R10-102, PP24,422), ‘Mayan White’ (R10-108, patent pending) and ‘Mayan Pink’ (R10-105-Q54, patent pending) have been released and are commercially available.

**Other planned research:**
- Breed other sterile cultivars with different flower colors (i.e. white with purple throat, white with pink throat) and other growth habits (medium or dwarf sizes, trailing, etc.).
- Design culture guides using growth regulators to obtain excellent looking *Ruellia* plants in containers.

**How can you use this information:**
- The *Ruellia* ‘Mayans’ have excellent landscape performance as perennials (up to zone 9) or as annuals in northern states.
- Unrooted cuttings of the ‘Mayans’ are available from HMA. Other selections will be available for private trials under Material Transfer Agreements with UF ([http://www.ffsp.net](http://www.ffsp.net))

**Acknowledgements:** Riverview Flower Farms for conducting on-site trials, Knox Nursery for providing Ellepots for breeding research.