Five of the more recent runner-type peanut (Arachis hypogaea L.) cultivar releases in the southeast have a seed size that is significantly larger than ‘Georgia Green’. The large-seeded cultivars include ‘Georgia-06G’, ‘Florida-07’, ‘Tifguard’, ‘Georgia-07W’, and ‘AP-4’. The seed count per pound for these cultivars ranges from approximately 600 to 650, compared to 800-850 seed per pound for Georgia Green. This difference in seed size has resulted in some challenges for producers. When sown at the recommended six seed per row-foot rate, the larger seed size cultivars require approximately 30 pounds per acre more seed than Georgia Green. The typical range of seeding rate between Georgia Green and the large-seeded cultivars is 105 to 135 pounds or more per acre. At a seed cost of $0.75 per pound, the cost differential between the two seed sizes is approximately $22.50 per acre more to plant the large-seeded cultivars. Trials were established at three locations in 2008 and 2009 in Georgia to determine if the large-seeded cultivars could be planted at reduced rates in order to lower seed cost per acre without reducing yield potential. Data from the trials indicated no difference in yield (p<0.05) for large-seeded cultivars planted at 5.2 seed per row-foot compared to 6 seed per row-foot. The results indicate a cost savings in seed. Another challenge is the calcium requirement for large-seeded runner cultivars. Trials were established in 2009 to determine the “pegging zone” threshold for large-seeded cultivars. Preliminary data indicates the large-seeded cultivars will require a higher “pegging zone” calcium level. The exact level has yet to be determined.