In 1961, the peanut yield in Georgia was 1200 lbs./A, and 470,000 acres were harvested. By 1977, yields were up to 2500 lbs./A and remained in that range for 15 years.

The introduction of Florunner peanut variety contributed to the general increase in yield. However, as with most systems, that change also allowed for other changes in disease susceptibility.

Georgia, at the time, was primarily a runner peanut state and only a small percentage of growers grew Spanish or Virginia peanut.

In 1977, most peanuts were grown dry land with only about 20% - 30% under irrigation...but that changed quickly in the 80’s as lenders insisted on irrigation capability to receive loans in agriculture production.

The 80’s growers had a new cultivar, Florunner and irrigation (center pivot) was on the rise. However, they faced several new problems such as Rhizoctonia, White Mold, Leaf Spot and TSWV.

Rhizoctonia became a serious problem since the cultivar Florunner with the addition of irrigation developed large vines, which provided the optimum conditions for disease development.

White mold flourished because of the deep vines and ample moisture provided the peanut crops. At the time, chemical control tools were very few and weak. PCNB was available but required 100 lb./A and was relatively expensive to purchase and apply. A combination of PCNB-Mocap was evaluated by Sam Thompson, and recommended and adopted by growers almost immediately. However, control was still inadequate and cost was relatively high.

Our lab experimented with chlorpyrifis (Lorsban) and found that the first break down product was fungicidal at the same level as PCNB. Lorsban was adopted as a fungicide for white mold and used for almost a decade. However, other materials began to appear. Spotless, a sterol inhibiting fungicide demonstrated promise for both leaf spot and soil borne disease control. However, a metabolite was found to be carcinogenic and it was dropped by Valent.

However, other sterol inhibiting fungicides finally did make it to market and changed disease control on peanut.

Tebuconazole-(Folicur) was one of the first to make it to market in 1994 and still continues to be a big player in the peanut disease control program in Georgia.

Pod rot – Peanut pod rot has been a concern on peanuts, primarily the large seeded cultivars such as the Virginia peanuts and at times the runner peanuts, but seldom on the Spanish cultivars.

Over about ten years, our lab investigated the cause and the control of pod rot in Georgia. Although disease organisms were always associated with the disease, specific fungicides would not control the problem. In addition, we could not consistently isolate a specific disease organism. Our conclusion after
10 years was that pod rot was initiated by a calcium deficiency which could be caused by a nutrient imbalance in the pod zone. This was similar to blossom end rot of tomato, which is also caused by a nutrient imbalance and calcium deficiency.

TSWV – In the 1990’s, TSWV became the biggest problem peanut growers faced, and through the efforts of the Georgia peanut team, they have developed a TSWV risk index and provided effective disease control strategies for growers using integrated pest management programs.

In the early 2000’s, we had new cultivars developed with resistance to many disease problems, such as TSWV and leaf spot, but other disease problems such as white mold and Rhizoctonia must be managed by other means.

We are fortunate to have a large number of fungicides currently available for control of diseases that growers can choose from. New chemistry continues to be developed and will certainly make control of some of our disease problems even more effective.

Nematodes – Nematodes in the 1980’s and 1990’s were present, but materials were available to effectively control them at a reasonable cost. The invent of “Tifgard” had certainly been a great benefit to growers in a time when we lack effective, inexpensive chemical controls.

As we solve one problem, another disease becomes a concern. Our current yields are about 3200 lbs. on the average and our growers have been able to achieve yields of 7000 lbs./A plus, primarily through their management techniques and the tools that the Research and Extension programs with Industry have provided.

Diseases will always be a problem and we must stay vigilant as to emerging diseases and work with our industry partners to provide our growers the best tools possible to manage Georgia’s peanut disease problems.