Importance of Foliar Boron Applications in Peanuts

Boron is Key for Fruit Set and Development

Low boron (B) supply can lead to a loss of fruit set and development. If boron deficiencies are severe, it can impact the flower's development itself. Quality and yield are also positively impacted by improved sugar translocation to developing peanuts and to prevent "hollow heart".

Conditions Leading to Boron Deficiencies

Because peanuts are normally grown in sandy soils that are low in boron, they are responsive to foliar boron applications. To further complicate the issue, boron is highly mobile and may rapidly leach from the root zone. Along with manganese, it is among the most commonly deficient micronutrients in sandy soils. Typically well-drained and excessively-drained sands are most susceptible to boron deficiency.

Desired Boron Tissue Test Values

The desired range for in tissue test for is between 25 to 60 ppm boron prior to or at bloom stage.

Key Application Timings and Rates

Because boron is important for pollination and fruiting, the recommended timing for B applications on peanuts is early bloom. The typical practice is to include boron with early fungicide sprays. In severe boron deficiencies it may advisable to make additional foliar sprays through fruit development. Boron can be applied in the soil at planting, however like nitrogen, boron can be highly mobile in soils and leach out and not be available later when needed. Most Universities recommendation for B on peanuts is approximately 0.5 lb. B/A**.** This can be applied in one application or split into 2, 0.25 lb. B/A applications.

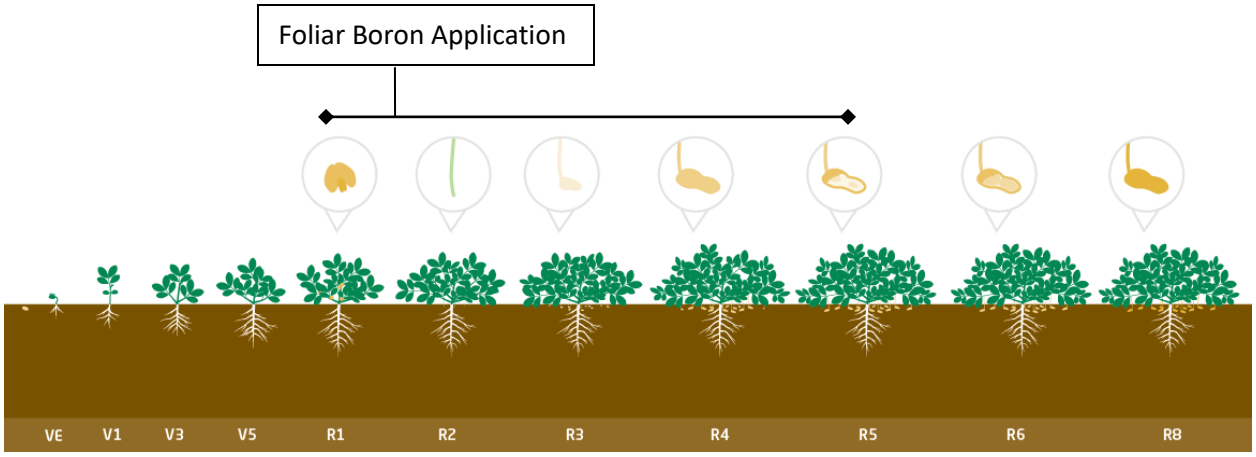
Boron Mobility

Boron tends to bind to cell walls once in the plant, limiting its mobility. BRANDT® Smart System® chemistry cross-links the boron molecule to allow it to move to the growing points much more efficiently. This leads to lower application rates, higher nutrient efficiency and better return on investment.

BRANDT Products

Key BRANDT product foliar application include:

BRANDT Smart B Mo
BRANDT Smart K B
BRANDT 10% Boron



Boron Deficiencies in Peanuts


Split branches from severe boron deficiencies. Credit: UF IFAS Extension

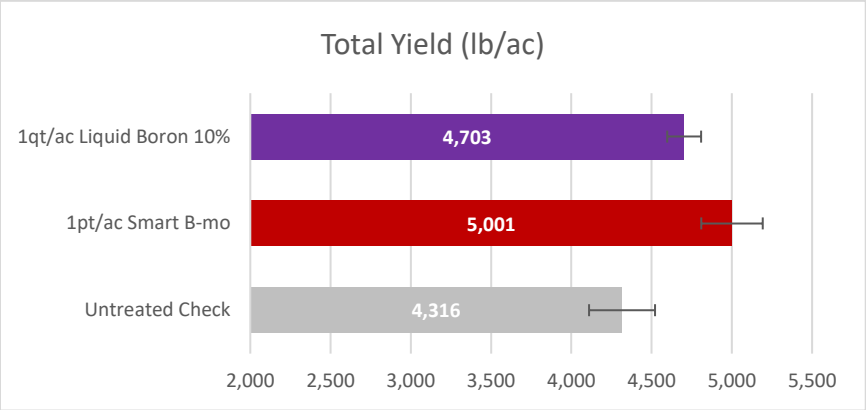

Hollow heart. Credit: www.fftc.org.tw


Boron toxicity. Credit: NC State Univ

Trial Data

BRANDT Smart B-Mo Trial on Georgia-06GF Peanuts conducted in Tchula, MS in 2019

- Application Info:
  - Applications on July 2 and July 29, 2019
  - Harvested: October 22, 2019



BRANDT Smart B-Mo Trial on Georgia-06G Peanuts conducted in Chula, GA in 2019

- Application Info:
  - Applications on June 25 and July 9, 2019
  - Harvested: September 26, 2019