

# Potassium Rates and Application Methods in Dark Tobacco

2010 – Stamps Farm – Franklin, KY



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- Objectives:

- Determine effect of reduced or excessive potassium application rates on dark tobacco yield
  - Site had soil test K index of 236 (medium)
  - Recommended 160 lbs  $K_2O/A$
  - 50%, 75%, 100%, 150% or 200%
  - 80, 120, 160, 240, or 320 lbs  $K_2O/A$
- Determine the effect of potassium application method/placement on dark tobacco yield
  - Broadcast and incorporated immediately before setting
    - 80, 120, 160, 240, or 320 lbs  $K_2O/A$
  - 2 band placements applied to surface immediately after setting
    - 1 band down center of each row middle
    - 2 bands approximately 8 inches on either side of row
      - » 80, 120, or 160 lbs  $K_2O/A$  for each banding method

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- TN D950 set May 28
  - 4900 plants/A
    - 40" rows, 32" plant spacing
- All K treatments applied May 28
  - Sulfate of potash (0-0-50)
- N and P applied to entire trial according to soil test.
- All other practices standard
- Randomized complete block with 4 replications
- Tobacco harvested August 30
- Air-cured
- Stripped December 9

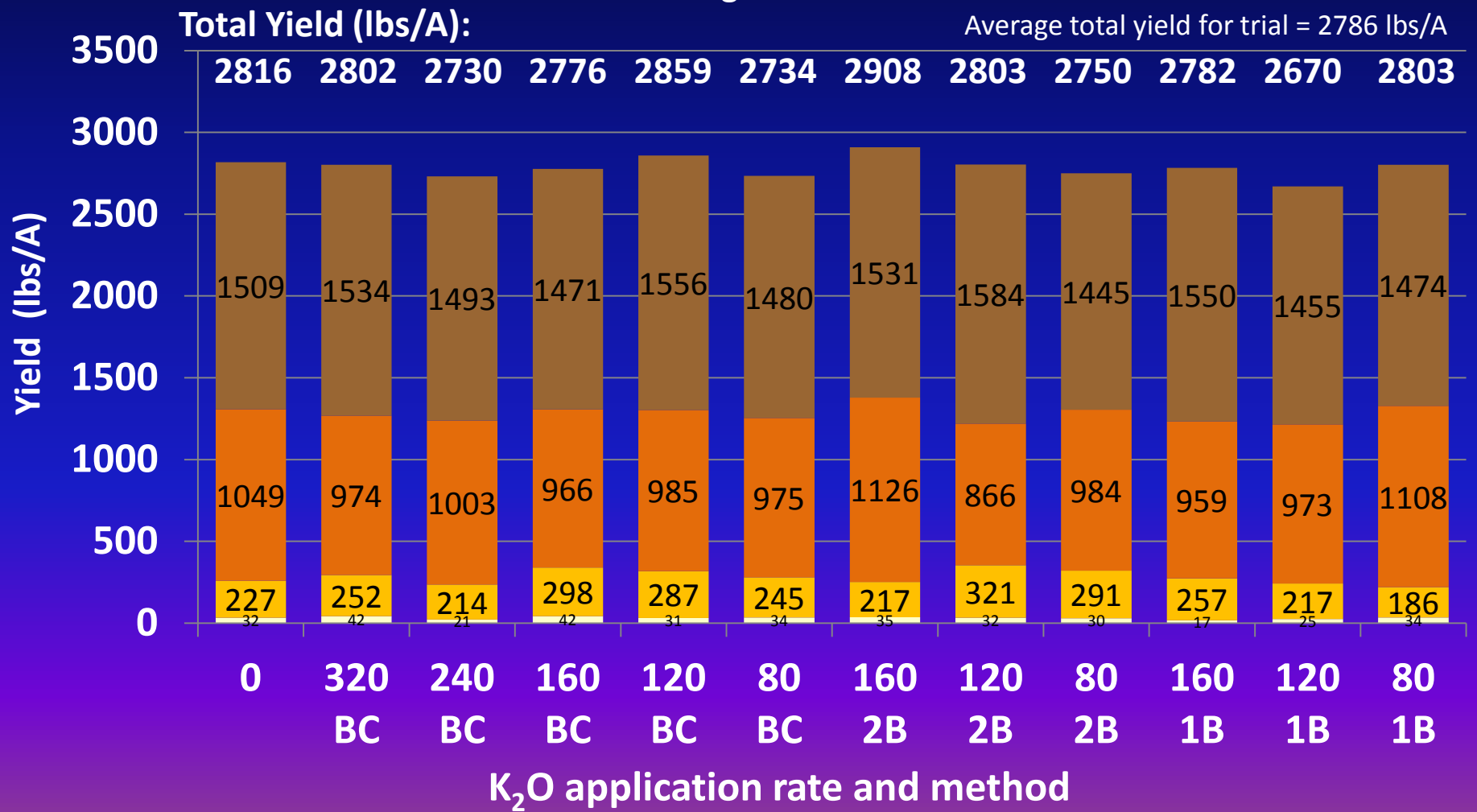
Trt	% of UK Recom.	Lbs K <sub>2</sub> O applied	Applic Method
1	0%	0	
2	200%	320	Broadcast
3	150%	240	Broadcast
4	100%	160	Broadcast
5	75%	120	Broadcast
6	50%	80	Broadcast
7	100%	160	2 Bands
8	75%	120	2 Bands
9	50%	80	2 Bands
10	100%	160	1 Band
11	75%	120	1 Band
12	50%	80	1 Band

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## 2010 – Stamps Farm – Franklin, KY – Dark Air-Cured Yield

LSD(.10) =      23      112      171      168      223 (total)

                    ■ Trash   ■ Lug   ■ Second   ■ Leaf



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0 K<sub>2</sub>O per acre



320 lbs K<sub>2</sub>O per acre