Preliminary Evaluation of Mechanical Harvest in Dark and Burley Tobacco

2011 – UKREC, Princeton, KY – Harvested October 6

- Compared walk-behind and Kirpy harvesters to hand harvest in dark and burley tobacco in 2011.
 - Dark: PD 7309 (4900 plants/A)
 - Burley: NC 7 (7841 plants/A)
- Data collected:
 - Time required for each harvest method
 - Leaf loss
 - Yield
- 2011 best dark and burley crop since 2006
 - Large tobacco, more brittle at maturity than in 2010

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Time Required for Cutting with Each Harvest Technique (cutting operation only)

| Tobacco | Cutting Method | # Plants | # Sticks | Time (min:sec) | Time/plant (sec) |
|---------|-------------------|----------|----------|-------------------|---------------------|
| Dark | Hand Cut | 144 | 24 | 5:12 | 2.17 |
| Dark | Walk Behind | 144 | 24 | 1:49 | 0.76 |
| Dark | Kirpy | 144 | 24 | 4:57 | 2.06 |
| Burley | Hand Cut | 216 | 36 | 6:49 | 1.89 |
| Burley | Walk Behind | 216 | 36 | 3:01 | 0.84 |
| Burley | Kirpy | 216 | 36 | 6:20 | 1.76 |

^{*}Tobacco from all 3 cutting methods was manually spiked on sticks. Dark tobacco was fire-cured.

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2011 – UKREC, Princeton, KY Leaf Loss at Harvest

| Tobacco | Cutting Method | # Plants | # Sticks | Mangled or missed plants | Leaves lost per plot | Leaves lost per plant |
|---------|-------------------|----------|----------|--------------------------|-----------------------------------|-----------------------|
| Dark | Hand Cut | 144 | 24 | 0 | 76 | 0.53 |
| Dark | Walk Behind | 144 | 24 | 2 | 128 | 0.89 |
| Dark | Kirpy | 144 | 24 | 5 | 93 Field + 290 Wagon = 383 | 2.66 |
| Burley | Hand Cut | 216 | 36 | 0 | 83 | 0.38 |
| Burley | Walk Behind | 216 | 36 | 4 | 137 | 0.63 |
| Burley | Kirpy | 216 | 36 | 6 | 111 Field + 286 Wagon = 397 | 1.84 |

Mechanical Harvester Evaluation in Dark Tobacco

2011 – UKREC, Princeton, KY – Dark Fire-Cured Yield



Mechanical Harvester Evaluation in Burley Tobacco 2011 – UKREC, Princeton, KY – Burley Yield

