Collaborative Study of Low Nicotine Tobacco Agronomic Production Practices (LNTP) – Task Force Report

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Objectives:

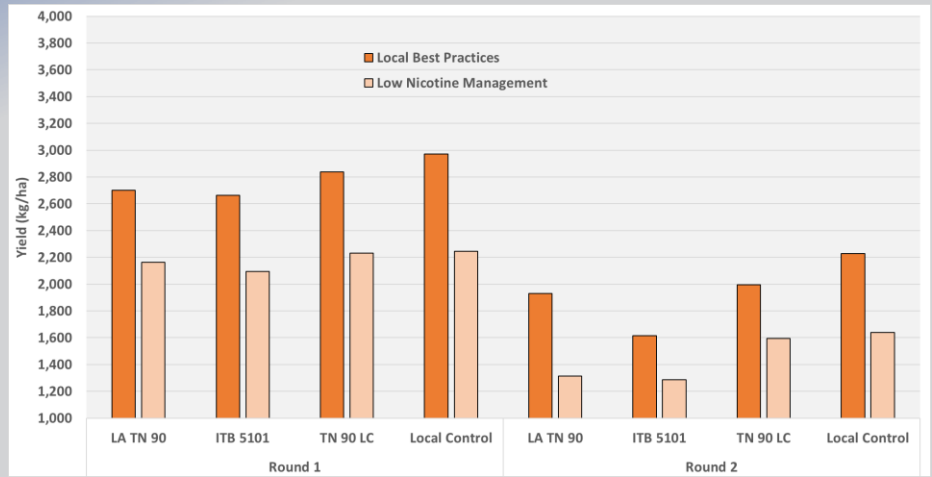
1. To determine the impact variety selection has upon nicotine levels.
2. To determine the impact of modified cultural practices have upon nicotine levels.

LNTP - TF

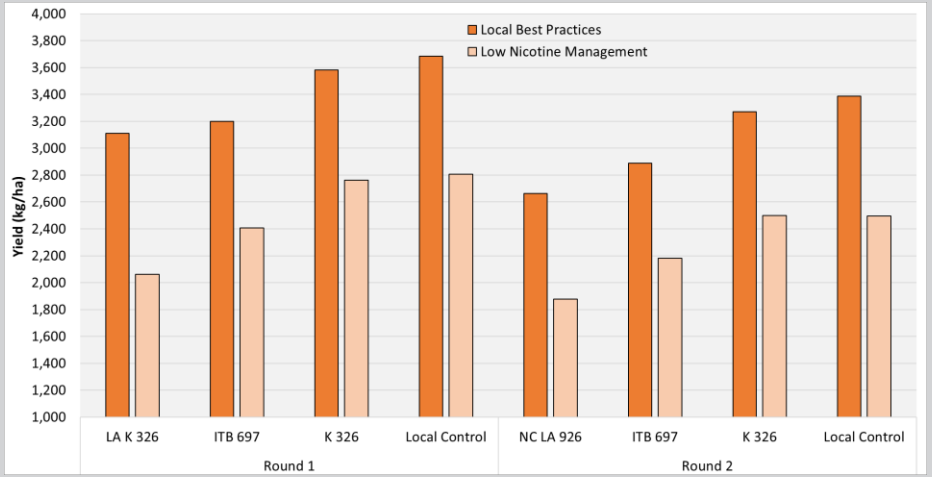
Project No.	Activity	2021		2022		Project Leaders
		Burley	Flue-Cured	Burley	Flue-Cured	
226	Number of Field Trails	8	9	6	7	TF Participants
	Number of chemistry analysis for nicotine were completed	4	5	4	4	Rowe, Lion, Lusso, Kudithipudi
	Yield data received from field trials	6	6	6	7	Lion, Lusso & Kudithipudi
	Grade Index data was received from field trials	4	4	5	6	Lion, Lusso & Kudithipudi
	Seed for the 3rd round of field trials were sent to 12 TF participants					Adams, Lewis & Malpica

LNTP TF Preliminary Yield Data
1st and 2nd Round of Field Trials

Burley Yield Averages Across 3 Locations
Bergerac, Daejeon, Virginia Tech



Flue Cured Yield Averages Across 5 Locations
Bergerac, Daejeon, Italy, NCSU, Virginia Tech

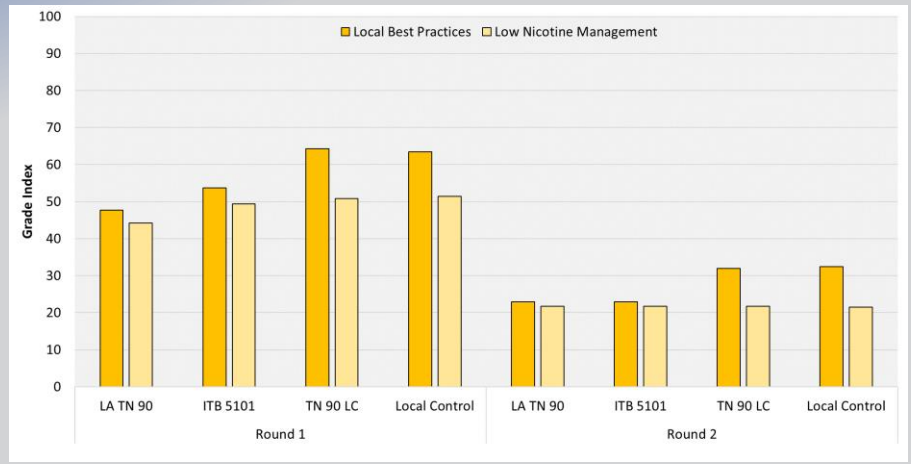


Based on 2 Years of Preliminary Data

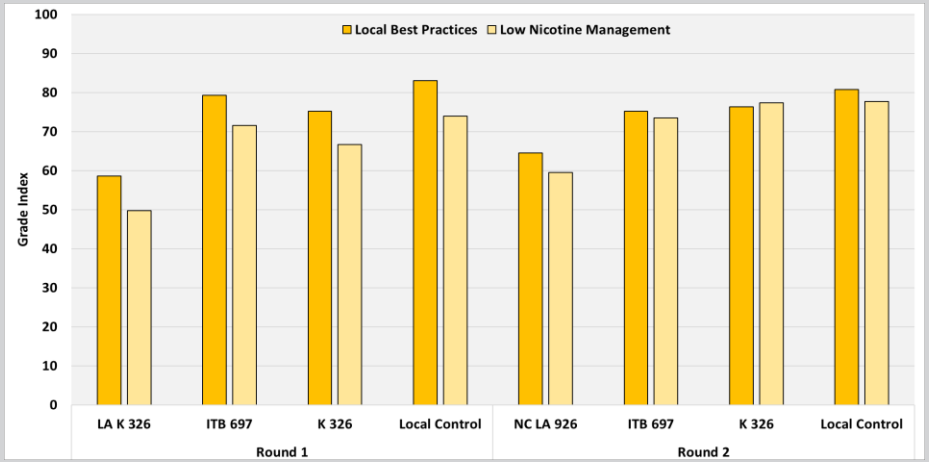
The lowest leaf yield in the burley test was observed in ITB 5101 with 1285 kg/ha in 2nd round and in the flue-cured test in NC LA 926 with 1789 kg/ha grown under low nicotine management

LNTP TF Preliminary Grade Index Data 1st and 2nd Round of Field Trials

Burley Grade Index Averages Across 3 Locations Bergerac, Daejeon, Virginia Tech



Flue Cured Grade Index Averages Across 5 Locations Bergerac, Daejeon, Italy, NCSU, Virginia Tech

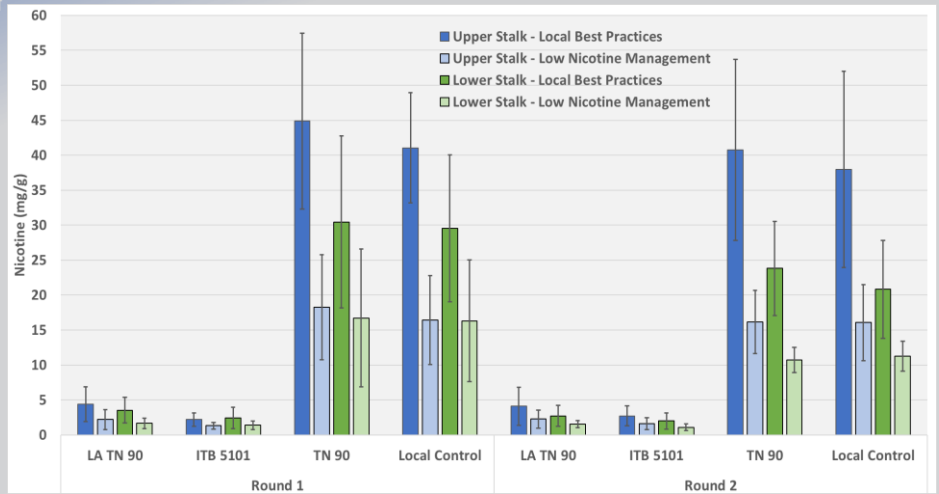


Based on 2 Years of Preliminary Data

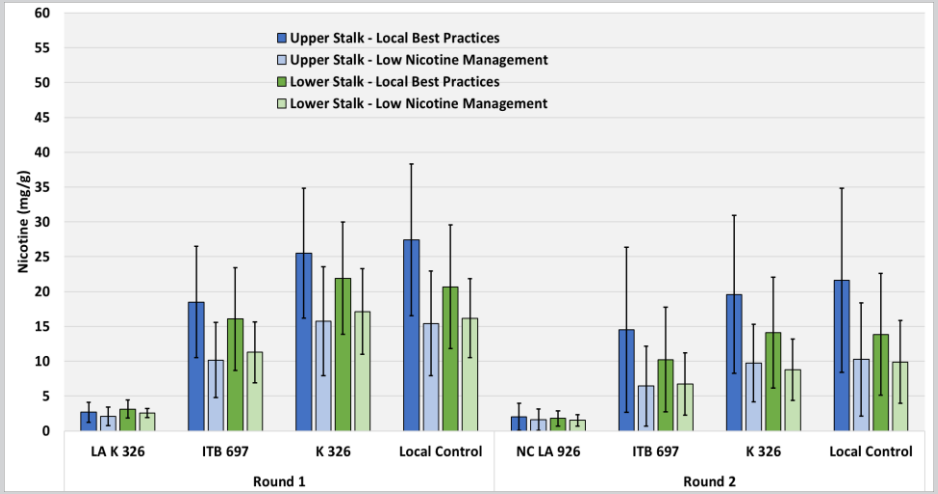
The lowest Grade Index in the burley test was observed in LA TN 90 in 2nd round and in the flue-cured test in LA K 326 in 2nd round grown under low nicotine management

LNTP TF Preliminary Nicotine Data
1st and 2nd Round of Field Trials

Burley Nicotine Averages Across 3 Locations
Bergerac, Daejeon, Virginia Tech



Flue Cured Nicotine Averages Across 4 Locations
Bergerac, Daejeon, Italy, Virginia Tech



Based on 2 Years of Preliminary Data

Burley Lowest Nicotine level – 1.09 mg/g for ITB 5101 in round 2 under low nicotine management

Flue-Cured Lowest Nicotine level – 1.5 mg/g for NC LA 926 in round 2 under low nicotine management

❖ Further projects

Activity	Leader	Time
226 – 1 CTR CS of Low Nicotine Tobacco Agronomic Practices (LNTP)	Kudithipudi & Malpica	12/31/2023
226 – 2 CXP on Low Nicotine Tobacco Agronomic Practices (LNTP)	Kudithipudi & Malpica	12/31/2023

❖ Main Challenges

- Seed shipment has improved but still a challenge
- Sample shipment for analysis has also presented some challenges
- Progress is slow due to the nature of the work
- Data standardization for comparison across locations could be improved

Thank You