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1. Selection Criteria for Urine Culture Analyses

Workers were selected for urine culture analyses based on the following criteria:

- All workers who answered 'yes' to experiencing any of the urinary symptoms in the prior 24 hours, excluding 'fever and chills'
- All workers who tested positive (1+, 2+, or 3+) for leukocyte esterase on the urine dipstick tests

But with the following additional restrictions:

- Culture a maximum of 5 workers who were negative for leukocyte esterase but positive for symptoms per day
- Culture a maximum of 25 workers who were negative for leukocyte esterase but positive for symptoms per week
- Do not culture any workers who have taken antibiotics within the prior week

Finally, the original protocol excluded workers with both negative leukocyte esterase results and reporting no symptoms, but the final analyses included 34 of these workers.

The demographic characteristics of the subset of workers receiving a urine culture are summarized in Table S1. Workers included in the urine culture subset had slightly shorter employment durations, on average. Drivers, irrigators, seed cutters, and seeders/reseeders were slightly underrepresented while cane cutters were substantially overrepresented.

2. Analyses of Female Workers (n=33)

We calculated summary statistics for the women in the cohort (n=33) (Tables S2 and S3). We found that the injury biomarker averages were much higher for women compared to their male counterparts, with the exception of ACR and NAG among seeders/reseeders (Table S2). Female seeders/reseeders had higher proportions of urine leukocyte esterase at pre-zafra. Both female seeders/reseeders and seed cutters had higher proportions of urine leukocyte esterase at late zafra than their male counterparts (Table S3). We also found differences in the symptoms reported by sex: female seed cutters more often reported back/flank pain, frequent urination, and fever/chills, and chistata than male seed cutters (Table S3). Female seeders/reseeders were more likely to report fever or chills. Occupations with a greater proportion of women (seeders/reseeders and seed cutters) had higher proportions of health-related behaviors. Females were largely driving this difference for seed cutters, reporting consistently higher proportions of the health-related behaviors (Table S3).

Table S1. Participant characteristics for the urine culture subset compared to all participants

-	Full Cohort	Urine Culture Subset	
Total, N	251	70	
Age (Years)	231	70	
Mean	33.9	34.3	
Median	31	32.0	
SD	10.5	11.1	
Range	18-63.5	19.8-60.0	
Employment Duration (Years)			
Mean	10.1	8.7	
Median	7	4.5	
SD	9.2	9.7	
Range	0-40.0	0-40.0	
eGFR (mL/min/1.73m²)			
Mean	112.4	106.6	
SD	19.0	24.1	
Range	28.9-180.9	28.9-139.3	
Job Task			
Drivers	41 (16.3%)	9 (12.9%)	
Factory Workers	57 (22.7%)	14 (20.0%)	
Cane Cutters	51 (20.3%)	28 (40.0%)	
Irrigators	49 (19.5%)	7 (10.0%)	
Agrichemical Applicators	29 (11.6%)	10 (14.3%)	
Seed Cutters	9 (3.6%)	1 (1.43%)	
Seeders/Reseeders	15 (6.0%)	1 (1.43%)	

Table S2. Participant characteristics and late-zafra biomarker results by job category among females (n=33)

	Overall	Non-Field Workers	Field Workers	
		Factory Workers	Seed Cutters	Seeders/ Reseeders
Total, N	33	2	10	21
Age (Years)	•			
Mean	31.1	42.0	33.3	29.1
Median	29.0	42.0	33.5	27.0
SD	9.5	7.0	11.8	7.7
Range	19.0-56.0	37.0-47.0	19.0-56.0	19.0-51.0
Employment Duration (Years)	•			
Mean	4.6	14.5	5.3	3.3
Median	3.0	14.5	3.5	3.0
SD	4.5	2.1	5.4	2.6
Range	0-20.0	13.0-16.0	1.0-20.0	0-10.0
eGFR (mL/min/1.73m²)	•			
Mean	118.3	113.1	111.7	122.0
SD	21.8	10.0	26.4	20.1
Range	50.0-147.7	106.1-120.2	52.2-134.9	50.0-147.7
NAG (U/g)	•			
GM	1.3	0.8	1.4	1.3
GSD	3.6	1.3	2.9	4.2
NGAL (μg/g)	•			
GM	25.0	28.4	25.1	24.7
GSD	3.8	2.5	2.8	4.6
IL-18 (ng/g)	•			
GM	25.1	51.4	15.1	29.8
GSD	3.0	2.0	3.1	2.9
ACR (mg/g)	•			
GM	4.7	2.4	3.7	5.6
GSD	3.6	2.4	3.2	3.9

Table S3. Self-reported urinary symptoms and health-related behaviors in the previous 3 months by job category among females (n=33)

	Factory workers (ref)	Seed cutters	Seeders/ reseeders
Total, N	2	10	21
Symptoms, Prior 3 Months	_		
% Abdominal, Back, Flank Pain	100%	50%	28.6%
% Burning/Pain during Urination	0%	10%	9.5%
% Frequent Urination	50%	20%	9.5%
% Fever or Chills	50%	40%	19.1%
% Chistata	50%	40%	23.8%
Dipstick Parameters, Pre-zafra	_		
% Positive Leukocyte Esterase	0%	4%	33.3%
% Positive Proteinuria	0%	0%	0%
Dipstick Parameters, Late zafra ^a	_		
% Positive Leukocyte Esterase	0%	55.6%	57.1%
% Positive Proteinuria	0%	0%	4.8%
% Positive Blood	0%	11.1%	14.3%
Health-Related Behaviors and Diagnoses, Prior 3 Months	_		
% Taken Antibiotics	0%	80%	19.1%
% Taken Pain Medication ≥ 3 days	100%	40%	14.3%
% Sought Medical Treatment	100%	40%	19.1%
% Diagnosed with a UTI	50%	10%	19.1%

^a n=9 for seed cutters