

Ethnic Specificity of Species and Strain Composition of *Lactobacillus* Populations from Mother-infant Pairs, Uncovered by Multilocus Sequence Typing

Lixia Yuan¹, Xuelin Zhang¹, Baolong Luo¹, Xu Li¹, Fengwei Tian², Wenli Yan^{1*} and Yongqing Ni^{1*}

¹School of Food Science and Technology, Shihezi University, Fourth Nouth Ave., Shihezi 832000, Xinjiang, People's Republic of China, ²School of Food Science and Technology, Jiangnan University, Wuxi, China

***Corresponding authors**

Email addresses: Y. N.: niyqlzu@sina.com; W.Y.: wenliyan62@sina.com

Tell: Y.N.:15299950600; W.Y.:13095096273

Contents

Supplementary Figures..... 3

Fig. S1 Fingerprint typing cluster of 64 representative strains of *L. paracasei* based on Box-air and (GTG)₅ primers..... 3

Fig. S2 The phylogenetic tree of 64 representative *L. paracasei* strains based on the concatenated sequence of the seven housekeeping genes. The maximum likelihood method was used for the analysis with 1,000 bootstrap repeats. 4

Supplementary Tables.....5

Table. S1 The characteristics and demographic data of the mothers and infants in this study..... 5

Table. S2 The survey overview of main diet of mothers and infants of two ethnic groups during breastfeeding in this study.....5

Supplementary Figure

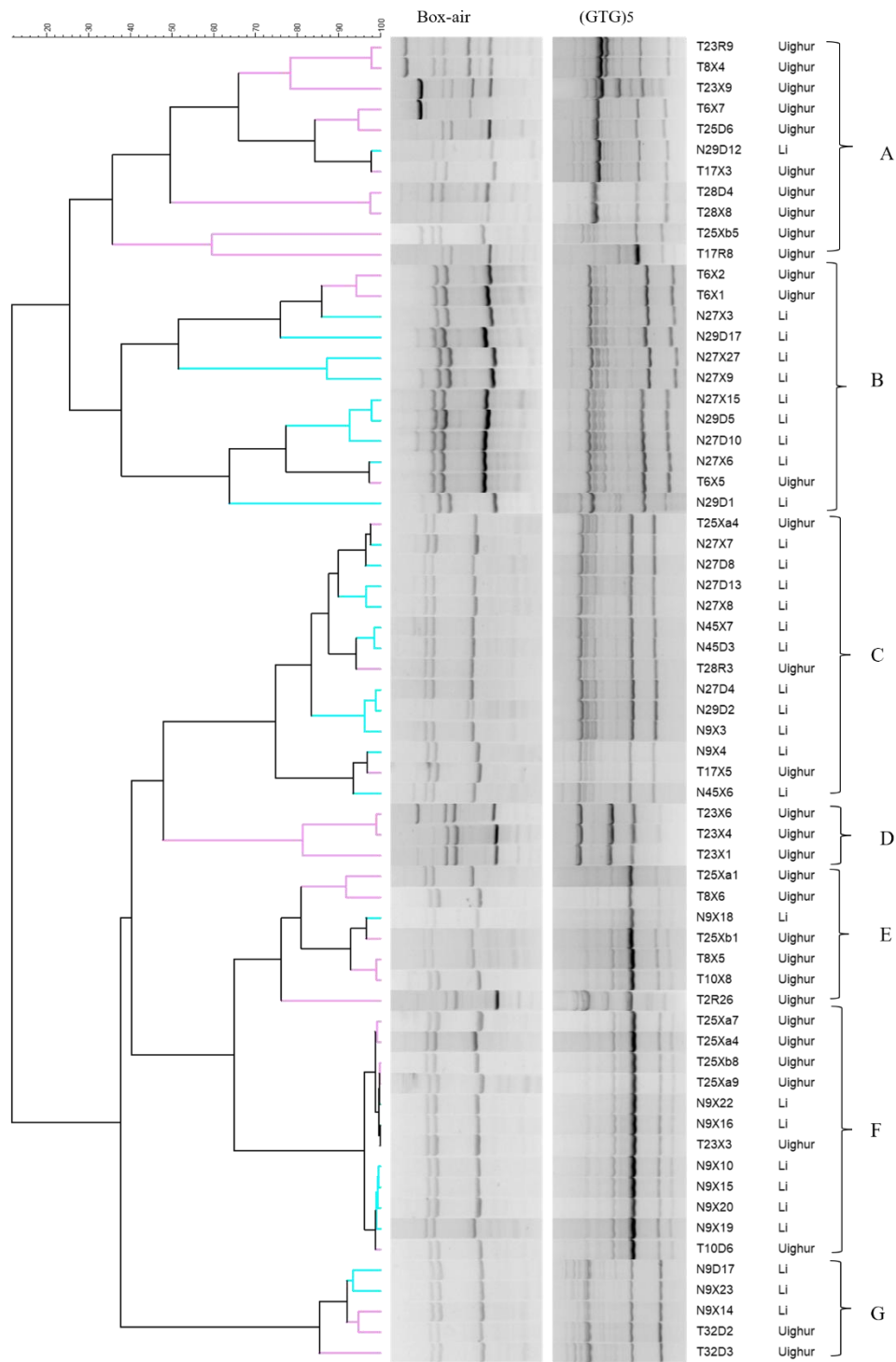


FIG. S1 Fingerprint typing cluster of 64 representative strains of *L. paracasei* based on Box-air and (GTG)5 primers.

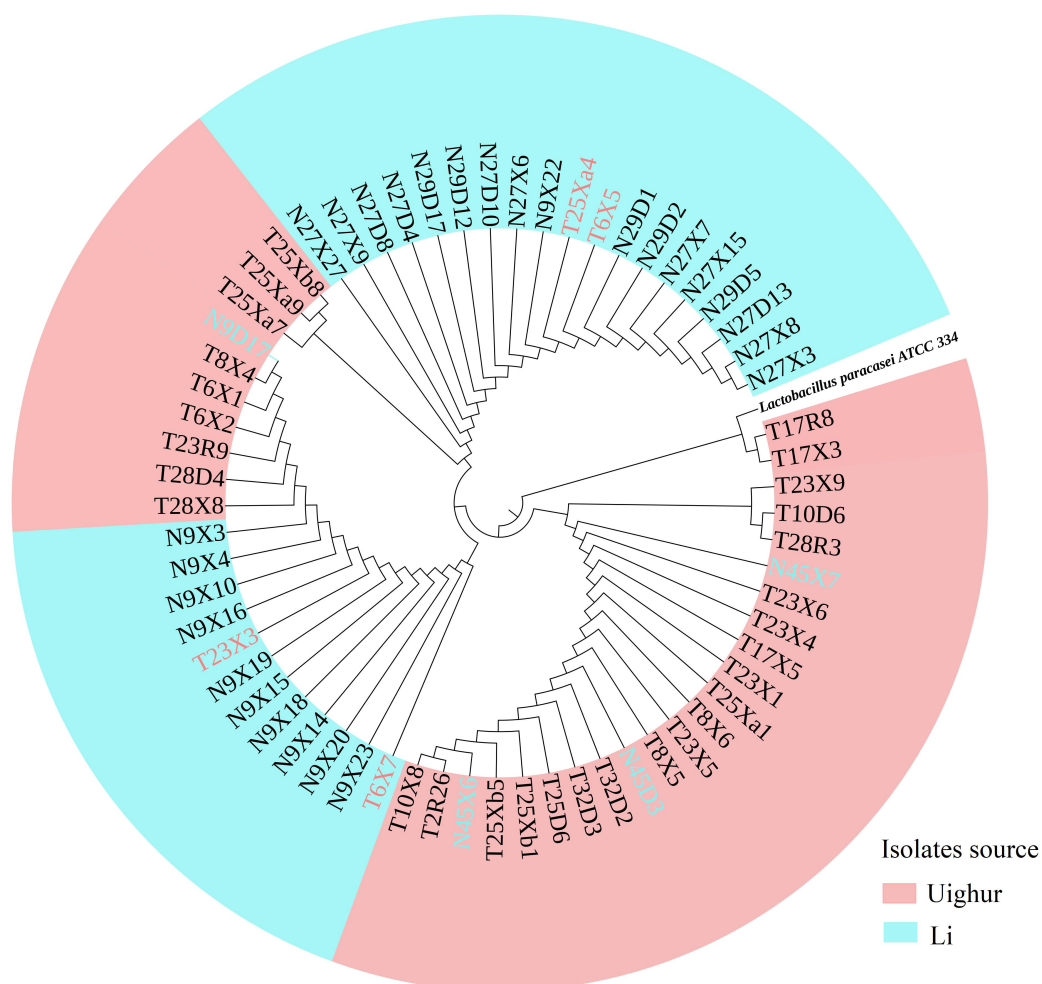


FIG. S2 The phylogenetic tree of 64 representative *L. paracasei* strains based on the concatenated sequence of the seven housekeeping genes. The maximum likelihood method was used for the analysis with 1,000 bootstrap repeats.

Supplementary Tables

Supplementary Table S1. The characteristics and demographic data of the mothers and infants in this study.

Characteristics and demographic data	Values (%)	
	Uighur	Li
Infant sex		
Male	8 (47)	7 (50)
Female	9 (53)	7 (50)
Feeding way		
Breastfeeding	0	1 (7)
breastfeeding + formula feeding	1 (6)	2 (15)
breastfeeding + liquid feeding	16 (94)	8 (57)
formula feeding + liquid feeding	0	3 (21)
infant weight (kg)	7.27 ± 0.07*	7.29 ± 0.57*
infant length (cm)	66	71
Maternal BMI condition		
Normal (18.5-23.9)	8	10
Slightly fat (24.0-26.9)	1	3
Obesity (27-29.9)	7	1
Unknown	1	0

*, Mean ± SD

Supplementary Table S2. The survey overview of main diet of mothers and infants of two ethnic groups during breastfeeding in this study

Ethnic groups		Main diet
Li	Monther	Breakfast: rice porridge, papaya porridge, powder soup (seafood) , occasionally pickles Lunch: congee, sour melon fried meat, pickled cabbage, fish, snail, occasionally chicken and duck Dinner: porridge side dish: coconut , mango, papaya
	Infant	Feeding way: breast milk or milk powder
Uighur	Monther	Breakfast: milk tea, soy milk, milk, naan bread Lunch: noodles, lamb and rice, beef, onion Dinner: soup, rice noodles side dish: dried fruit, rose sauce, cheese
	Infant	feedingway: Breast milk , milk powder, feed a liquid diet occasionally