

Supporting information

## Effects of Long-term Cotton Continuous Cropping on Soil Microbiome

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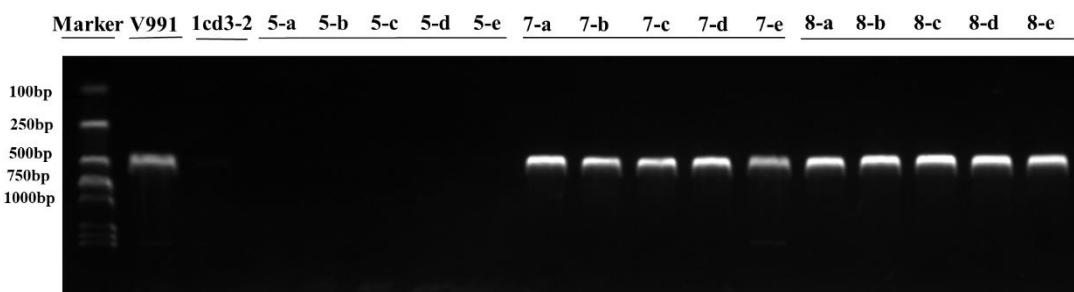
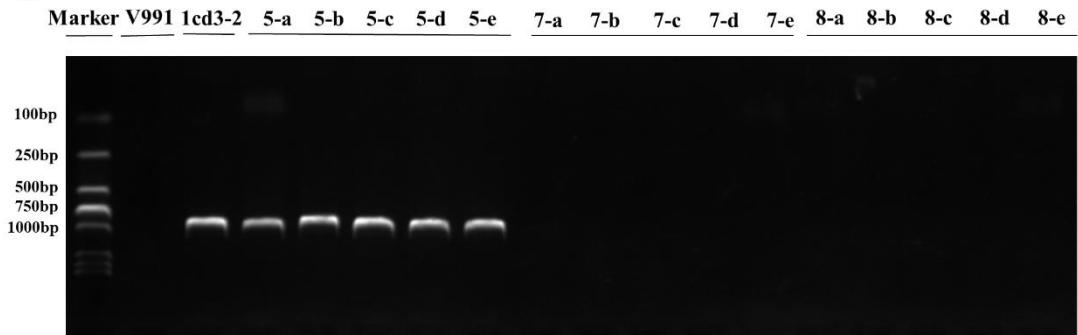
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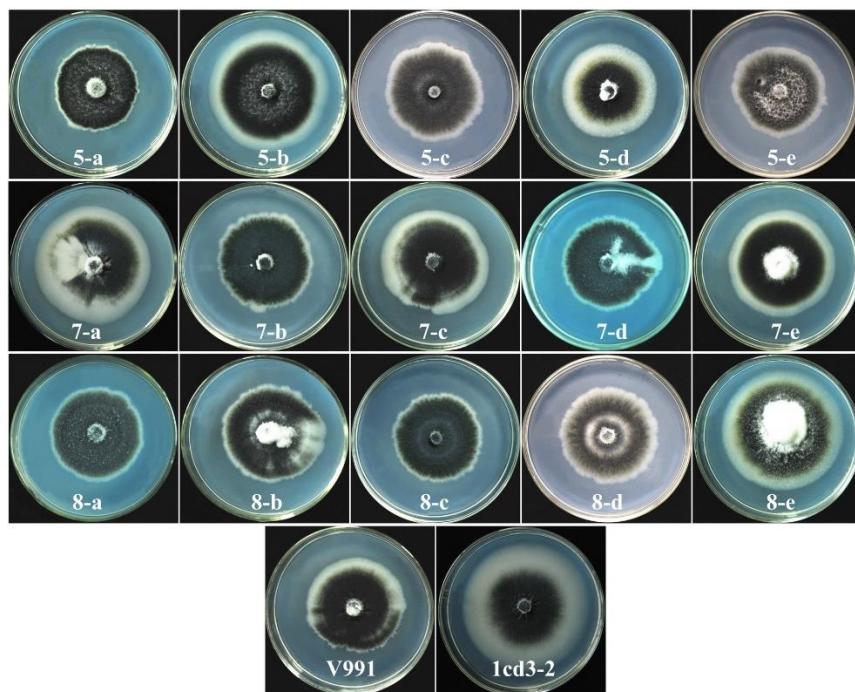
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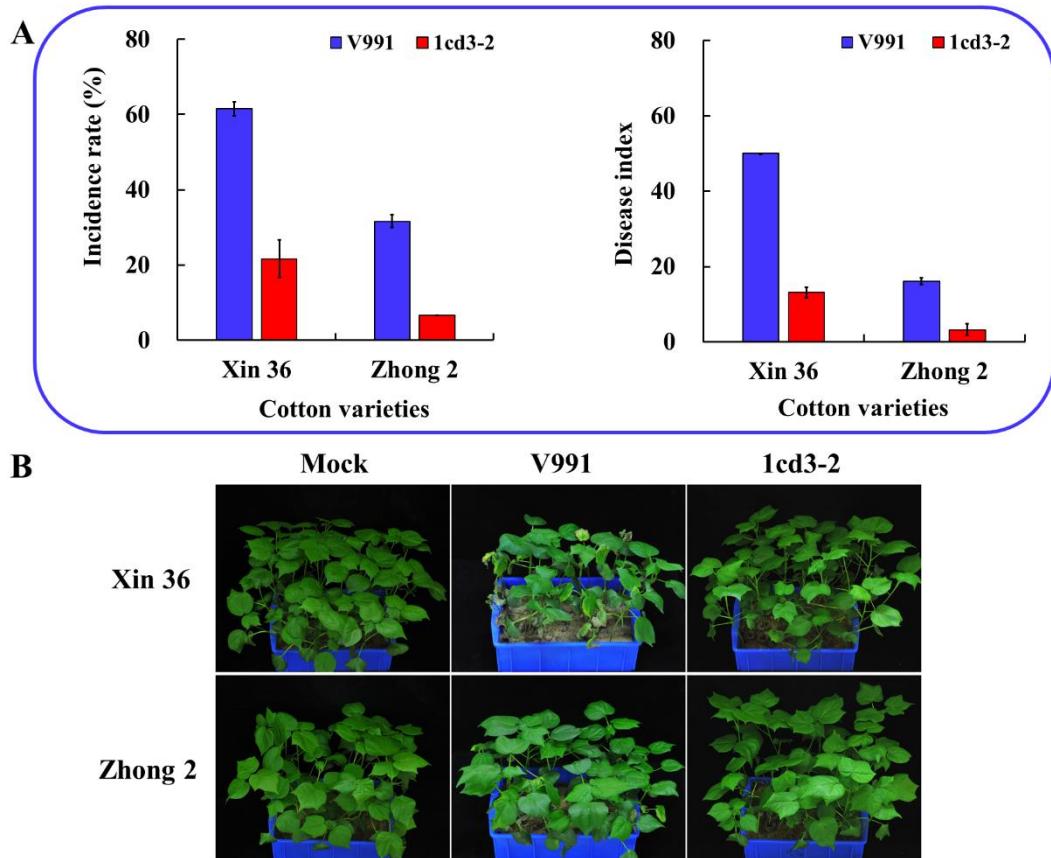
E-mails: [lfzhu@mail.hzau.edu.cn](mailto:lfzhu@mail.hzau.edu.cn)

**A****B**

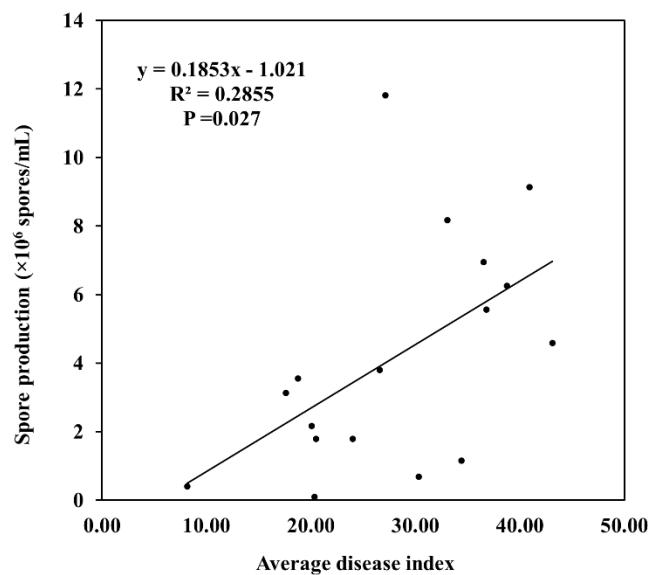
**Figure S1.** Identification of the defoliating (A) and non-defoliating (B) pathotypes of all isolates with the corresponding molecular marker (Full-length gels).



**Figure S2.** Colony morphology of 15 isolates and 2 reference isolates.



**Figure S3.** The disease incidence and phenotype of two cotton varieties after inoculated with reference isolates.



**Figure S4.** The correlations between spore production and average disease index.

Isolates	Growth rate (cm/d)	Spore production ( $\times 10^6$ spores/mL)	Disease index		Average disease index
			Xinluzao 36	Zhongzhimian 2	
V991	0.19± 0.02cd	8.17± 0.80abc	50.00± 0.00abcd	16.14± 0.82bcde	33.07± 0.41abcde
1cd3-2	0.25± 0.00a	0.4± 0.18g	13.10± 1.42e	3.26± 1.59f	8.17± 1.51g
5-a	0.20± 0.01bcd	0.10± 0.00g	33.28± 4.25de	7.37± 0.70ef	20.32± 1.78defg
5-b	0.20± 0.01bcd	1.78± 1.38efg	27.08± 9.22de	13.92± 1.41cde	20.49± 5.32defg
5-c	0.19± 0.01cd	1.78± 1.53efg	37.44± 7.60cde	10.58± 4.74def	24.01± 1.43cdef
5-d	0.19± 0.00cd	3.13± 1.95defg	24.98± 1.63de	10.23± 1.06def	17.61± 1.35fg
5-e	0.19± 0.00cd	0.68± 0.12fg	41.73± 1.02bcde	18.94± 4.45abcd	30.33± 2.73abcdef
7-a	0.20± 0.00bcd	11.82± 0.28a	34.44± 0.57de	19.79± 1.24abc	27.11± 0.9bcdef
7-b	0.18± 0.01cd	3.80± 1.50defg	42.48± 5.38bcde	10.66± 0.18def	26.57± 2.78bcdef
7-c	0.19± 0.01cd	6.25± 3.02bcd	64.46± 19.42abc	13.04± 4.70cde	38.75± 12.06abc
7-d	0.20± 0.01bcd	3.55± 0.76defg	26.89± 3.50de	10.65± 0.64def	18.77± 1.43efg
7-e	0.18± 0.01cd	2.17± 1.52efg	30.64± 0.80de	9.47± 1.41ef	20.05± 1.10defg
8-a	0.20± 0.00bcd	5.57± 0.67bcde	48.62± 10.26abcd	24.95± 3.27a	36.79± 6.77abc
8-b	0.18± 0.01cd	9.13± 0.93ab	68.24± 19.67ab	13.58± 3.10cde	40.90± 8.29ab
8-c	0.21± 0.01bc	4.58± 0.16cdef	71.93± 13.55a	14.30± 3.82cde	43.12± 4.87a
8-d	0.17± 0.01d	6.95± 1.27bcd	50.03± 0.84abcd	23.01± 2.85ab	36.52± 1.84abc
8-e	0.22± 0.00b	1.15± 0.12fg	42.18± 2.18bcde	26.67± 0.86a	34.42± 0.66abcd

**Table S1.** Cultural characteristics of *V. dahliae* isolates and the results of pathogenicity on two cotton varieties. Isolates from field 5F including 5-a, 5-b, 5-c, 5-d and 5-e; isolates from field 7F including 7-a, 7-b, 7-c, 7-d and 7-e; isolates from field 8F including 8-a, 8-b, 8-c, 8-d and 8-e. (Values are means ± standard deviation. The followed same letter for a given factor are not significantly difference. P < 0.05.)