

Table S1. Genomic positions of the TnXax1 IRs

Genome or Plasmid identified	IR start	IR stop	Conserved nucleotides
<i>Xanthomonas axonopodis</i> Xac29-1 pXAC64 (64,118 bp)	3989	4080	92/92
	12932	12842	74/92
	13749	13839	78/91
	17700	17609	75/94
	25197	25108	80/90
	52639	52729	74/92
	53945	54035	78/91
	58406	58315	75/94
<i>Xanthomonas axonopodis</i> Xac29-1 (5,153,455 bp)	3802552	3802643	92/92
	3811473	3811382	72/94
	3814001	3813911	70/91
	4151804	4151713	76/92
<i>Xanthomonas axonopodis</i> pv. <i>citrumelo</i> F1 (4,967,469 bp)	2452240	2452149	92/92
	2558748	2558839	92/92
	2438697	2438771	66/76
<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> 85-10 (5,178,466 bp)	662686	662630	51/58
	2480425	2480345	66/85
	2603770	2603802	30/33
	2610728	2610693	32/36
	2614800	2614710	75/92
	2764198	2764272	66/76
	2776534	2776443	92/92
	4369321	4369401	67/83
<i>Xanthomonas axonopodis</i> pv. <i>citri</i> str. 306 pXAC64 (64,920 bp)	3350	3441	92/92
	12294	12204	74/92
	14311	14401	78/91
	17959	17868	75/94

	25458	25369	80/90
	53668	53758	74/92
	54974	55064	78/91
	58823	58732	75/94
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<i>Acidovorax citrulli</i> AAC00-1 (5,352,772 bp)	2975223	2975303	66/85
	2978700	2978785	69/86
	2978963	2978872	90/92
	3224781	3224872	90/92
	3225044	3224959	69/86
	3228521	3228441	66/85
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<i>Xanthomonas fuscans</i> subsp. <i>fuscans</i> str. 4834-R, pla (45,224 bp)	93	1	75/94
	8706	8797	77/92
	8796	8771	24/26
	14156	14247	76/92
	14246	14221	24/26
	17444	17353	76/92
	17354	17379	24/26
	40015	40105	83/91
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<i>Xanthomonas citri</i> pv. <i>aurantifolii</i> strain C340 PthC (4,876bp)	455	545	82/91
	4325	4278	44/49
	4519	4453	58/68
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<i>Xanthomonas citri</i> plasmid pXcB (37,106 bp)	31463	31553	82/91
	35333	35286	44/49
	35527	35461	58/68
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<i>Xanthomonas fuscans</i> subsp. <i>fuscans</i> str. 4834-R, plc (41,950 bp)	19199	19108	75/92
	21844	21934	75/91
	22338	22247	73/92

26372	26462	75/91
30746	30837	73/92
31908	31820	76/90
38186	38276	81/91
41950	41904	42/47

Xanthomonas axonopodis pv. *manihotis* strain CFBP1851 pthBXam (10,736 bp) 3263 3353 81/91

Xanthomonas axonopodis Xac29-1 pXAC33 (31,801 bp) 9094 9004 78/91
17429 17518 80/90
24927 25018 75/94
28584 28494 78/91

Xanthomonas axonopodis pv. *citri* str. 306 pXAC33 (33,700 bp) 5469 5558 80/90
12968 13059 75/94
16706 16616 78/91
30836 30746 78/91

Xanthomonas citri subsp. *citri* Aw12879 pXcaw58 (58,317 bp) 12492 12582 78/91
22394 22485 74/94
26247 26156 78/92
27553 27463 74/92

Xanthomonas citri pv. *citri* strain X0053 PthAW (4,559 bp) 460 550 78/91
4312 4221 74/94

Xanthomonas smithii subsp. *citri* pB3.7 (4,500 bp) 133 223 78/91
4378 4287 75/94

Xanthomonas smithii subsp. *citri* pthA-KC21 (4,070 bp) 109 199 78/91
3959 3867 75/95

Xanthomonas smithii subsp. *citri* pB3.1 (3,985 bp) 119 209 78/91

	3767	3676	75/94
<i>Xanthomonas citri</i> hssB3.0 gene for avirulence protein (3,718 bp)	101	191	78/91
<i>Xanthomonas axonopodis</i> pv. <i>glycines</i> strain AG1 plasmid pAG1 (15,143 bp)	3912	3821	75/94
	4663	4573	74/92
	14711	14802	78/92
	14897	14987	78/91
<i>Xanthomonas citri</i> strain 3213 PthA (4,275 bp)	349	439	78/91
	4198	4107	75/94
<i>Xanthomonas campestris</i> pv. <i>armoraciae</i> Hax (3,507 bp)	1	91	78/91
<i>Xanthomonas campestris</i> pv. <i>armoraciae</i> Hax3 (3,218 bp)	1	91	78/91
	3218	3150	56/71
<i>Xanthomonas citri</i> apl3 (4,639 bp)	101	191	78/91
	4562	4471	75/94
<i>Xanthomonas citri</i> apl2 (3,823 bp)	101	191	78/91
<i>Xanthomonas citri</i> apl1 (4,027 bp)	101	191	78/91
	3950	3859	75/94
<i>Xanthomonas vesicatoria</i> avrBs4 (4,000 bp)	72	162	78/91
	3912	3821	75/94
<i>Xanthomonas vesicatoria</i> plasmid pXV11 avrBs3 (4,366 bp)	374	464	78/91
	4226	4135	75/94
<i>Xanthomonas campestris</i> pv. <i>campestris</i> str. ATCC 33913	1902124	1902190	57/68

(5,076,188 bp)	2466511	2466591	67/82
	2482712	2482622	72/91
	2482622	2482650	26/29
	2491914	2492005	76/92
	2492195	2492272	60/84
	3434576	3434666	74/91
	4438478	4438566	75/91
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<i>Xanthomonas campestris</i> pv. <i>campestris</i> str. B100 (5,079,002 bp)	1453050	1452960	74/91
	2409940	2409863	60/84
	2410221	2410130	76/92
	2791168	2791078	73/91
	2791078	2791106	26/29
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<i>Xanthomonas campestris</i> pv. <i>campestris</i> str. 8004 (5,148,708 bp)	1476237	1476147	74/91
	2419112	2419035	60/84
	2419393	2419302	76/92
	2496533	2496623	72/91
	2496623	2496595	26/29
	2512734	2512654	67/82
	3137704	3137638	57/68
	4496061	4496149	75/91
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<i>Xanthomonas fuscans</i> subsp. <i>fuscans</i> str. 4834-R (4,981,995 bp)	1884500	1884596	74/97
	1886283	1886240	40/45
	2750592	2750676	69/85
	2751922	2751831	74/92
	4939801	4939891	76/92
	4946417	4946327	75/91
	4946455	4946423	31/35

	4953056	4953122	59/68
<i>Xanthomonas citri</i> subsp. <i>citri</i> Aw12879 (5,321,499 bp)	1262821	1262911	71/91
	3952635	3952544	72/94
	4729175	4729084	76/92
<i>Xanthomonas axonopodis</i> pv. <i>citri</i> str. 306 (5,175,554 bp)	3807325	3807235	70/91
	4143510	4143419	76/92
<i>Xanthomonas campestris</i> PthN (3,994 bp)	38	128	76/92
	135	225	76/92
	3579	3488	75/92
	3489	3517	26/29
<i>Xanthomonas oryzae</i> pv. <i>oryzae</i> strain PXO99 type III effector AvrXa23 (6,452 bp)	100	9	72/92
	754	844	72/91
	5541	5450	73/92
	6195	6285	74/91
<i>Xanthomonas oryzae</i> pv. <i>oryzae</i> PXO99 (5,240,075 bp)	321285	321375	73/92
	324403	324314	72/91
	559020	559111	73/92
	842065	842003	51/63
	1625939	1625971	31/33
	1633509	1633420	65/91
	1645151	1645242	72/92
	1649608	1649518	73/91
	1650262	1650353	72/92
	1781506	1781425	65/82
	1838885	1838816	57/71
	2359265	2359175	73/91
	2359919	2360010	73/92
	2363552	2363461	73/92

2387282	2387191	73/92
2387936	2388026	72/91
2392130	2392039	72/92
2527364	2527426	51/63
2681275	2681206	58/72
2682578	2682668	74/91
2686432	2686341	72/92
2687086	2687176	71/91
2739451	2739513	51/63
2893362	2893293	58/72
2894665	2894755	74/91
2898519	2898428	72/92
2899173	2899263	71/91
4104892	4104801	72/92
4105546	4105636	72/91
4110333	4110242	73/92
4110987	4111077	74/91
4114733	4114642	72/92
4115387	4115477	72/91
4118731	4118640	73/92
4119385	4119475	72/91

Xanthomonas oryzae pv. *oryzae* strain C8 Avr/pthC8b (4,525 bp)

3617	3526	72/92
4271	4361	74/91

Xanthomonas campestris pv. *malvacearum* Avrb6 (3,856 bp)

314	404	76/92
3763	3672	75/94

Xanthomonas oryzae pv. *oryzae* MAFF 311018 (4,940,217 bp)

1232038	1231948	74/91
1232692	1232783	73/92
1236438	1236348	74/91
1237092	1237183	72/92
1241876	1241786	72/91

1242530	1242621	72/92
2204911	2204821	74/91
2205565	2205656	73/92
2209623	2209533	74/91
2210920	2210989	59/72
2218495	2218433	51/63
2352097	2352188	72/92
2356288	2356197	73/92
2356941	2357032	73/92
2360576	2360486	73/91
2386917	2386826	73/92
2387571	2387661	72/91
3028589	3028658	57/71
3085100	3085181	65/82
3218732	3218641	73/92
3219386	3219476	74/91
3223441	3223350	73/92
3224095	3224185	74/91
3228882	3228791	73/92
3229536	3229626	73/91
3234212	3234121	71/92
3244797	3244886	65/91
3252366	3252334	31/33
4300513	4300575	51/63
4529444	4529353	73/92
4763458	4763547	72/91
4765690	4765600	72/92

Xanthomonas oryzae pv. *oryzae* AvrXa27 (22,214 bp)

3347	3256	72/92
4001	4091	72/91
8788	8697	73/92
9442	9532	74/91
13188	13097	72/92
13842	13932	72/91

17186	17095	73/92
17840	17930	72/91

<i>Xanthomonas oryzae</i> pv. <i>oryzae</i> KACC 10331 (4,941,439 bp)	1265943	1265853	72/91
	1266597	1266688	73/92
	2225929	2225839	74/91
	2226583	2226674	71/92
	2230641	2230551	74/91
	2231938	2232007	59/72
	2239521	2239482	36/40
	2377246	2377337	72/92
	2381013	2380923	73/91
	2401087	2400996	73/92
	2401741	2401831	72/91
	2406648	2406604	40/45
	2407301	2407392	73/92
	3035786	3035855	57/71
	3092324	3092405	65/82
	3223775	3223684	72/92
	3224429	3224519	72/91
	3229927	3229836	72/92
	3230581	3230671	73/91
	3234546	3234455	71/92
	3252722	3252690	31/33
	4307290	4307352	51/63
	4534573	4534482	73/92
	4767482	4767569	72/91
	4770598	4770508	72/92

<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> plasmid pXCV183 (182,572 bp)	101536	101571	31/36
	112968	113058	73/91
	113058	113030	26/29

<i>Xanthomonas arboricola</i> pv. <i>pruni</i> str. CFBP 5530 plasmid pXap41 (41,102 bp)	1514	1598	70/86
	11847	11812	31/36
	15966	16031	57/69
	25065	24975	74/92
<i>Xanthomonas axonopodis</i> pv. <i>glycines</i> strain 8ra plasmid pXAG81 (26,721 bp)	3912	3821	75/94
	4663	4573	74/92
	22797	22887	74/92
<i>Xanthomonas campestris</i> pv. <i>campestris</i> beta-galactosidase Gal35I (3,423 bp)	2801	2892	74/92
<i>Xanthomonas oryzae</i> pv. <i>oryzicola</i> BLS256 (4,831,739 bp)	653841	653779	53/63
	1558706	1558796	73/92
	1686668	1686616	47/53
	1697100	1697009	74/93
	2548617	2548706	66/91
	2556024	2555991	31/34
<i>Xanthomonas oryzae</i> pv. <i>oryzicola</i> Avr/Pth13 (3,170 bp)	2852	2761	74/93
<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> outer protein B (23,471 bp)	8848	8904	51/58
<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> avirulence protein AvrBsT (1,931 bp)	1395	1484	71/92
<i>Xanthomonas oryzae</i> avirulence protein AvrXa10 (3,720 bp)	4	92	70/91
<i>Xanthomonas albilineans</i> GPE PC73 (3,768,695 bp)	2246665	2246755	68/91
	1840960	1840907	42/54
<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> outer protein J (1,441	61	141	66/85

bp)

<i>Xanthomonas albilineans</i> str. GPE PC73, plasmid (24,837 bp)	7897	7932	33/36
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* conserved nucleotides: x/y where y is the full length of the IR compared to the canonical 92 bp of TnXax1 and x is the number of conserved nucleotides