

**Supplementary Table S3** Copy numbers of plant growth promoting traits associated genes in the genome of V4 strain and other strains

Promotion mechanism	Gene	V4	EA_18B1	EP_B64	ER_BY21311	ET_Et1/99	HS_Z67	
<b>IAA synthesis</b>	ipdC	1	0	1	1	1	0	
	dhaS	2	1	1	1	0	1	
<b>ACC deaminase</b>	dcyD	1	1	1	1	1	1	
<b>Nitrogen-fixation</b>	ntrB	1	0	1	1	1	1	
	ntrC	1	1	1	1	1	1	
<b>P-solubilization</b>	gcd	1	1	1	1	1	0	
	pqqE	1	1	1	1	1	0	
	pstA	1	1	1	1	1	1	
	pstA1	1	0	1	1	1	0	
	pitA	2	2	2	1	1	1	
	phnC	1	1	1	1	0	1	
	phnD2	1	1	1	1	0	1	
	phnL	1	0	1	1	0	0	
	phnK	1	0	1	1	0	0	
	appA	1	1	1	1	0	0	
	agp	1	1	1	1	1	0	
	phoP	1	1	1	1	1	0	
	phoR	1	1	1	1	1	1	
	<b>Siderophores</b>	iucC	1	1	0	0	1	0
		alcA	1	1	0	0	1	1
		ddc	1	1	0	0	1	0
mdfA		1	1	1	1	1	0	
znuA		1	1	1	1	1	0	
znuC		1	1	1	1	1	0	
hexR		1	0	1	1	0	1	
pykA		1	0	1	1	1	0	
lpxM		1	0	1	1	1	0	
mepM		1	1	1	1	1	1	
fhuA		2	2	2	3	1	2	
fhuE		1	1	1	0	0	0	
fepA		1	0	0	0	1	1	
tonB		1	1	1	1	1	0	
fepB		1	0	1	1	1	0	
fhuB		2	1	1	2	2	0	
fhuC	1	0	1	1	1	0		
fhuD	2	1	1	1	1	0		
fepC	1	0	2	1	1	0		
fepD	1	0	1	1	0	0		
<b>others</b>								
5-Aminolevulinic acid (5-ALA)	hemA	1	1	1	1	1	1	
spermidine synthase	speE	1	1	1	1	1	0	
Extracellular polysaccharide	galE	2	1	1	1	1	2	
Heavy metal resistance	gstA	2	2	2	2	1	1	
	gstB	1	1	1	1	0	1	
	gst3	1	0	0	1	0	1	
	cysC	1	0	1	1	1	0	
	cysD	1	0	1	1	1	1	
	cysH	1	0	1	1	1	1	
	cysK	1	1	1	1	1	0	
	zntA	1	0	1	1	1	1	
	copA	1	1	1	1	1	1	
	mtnA	1	1	1	1	1	0	
	mtnB	1	0	1	1	1	0	
	mtnC	1	1	1	1	1	0	
	mtnD	1	1	1	1	1	0	
	mtnK	1	1	1	1	1	0	
mtnN	1	1	1	1	1	1		

EA\_18B1: *Erwinia aphidicola* 18B1, EP\_B64: *Erwinia persicina* B64, ER\_BY21311: *Erwinia rhapontici* BY21311, ET\_Et1/99: *Erwinia tasmaniensis* Et1/99, HS\_Z67: *Herbaspirillum seropedicae* Z67