

TableS3 Informations on field strain of *P. operculella* and *P. absoluta* used in the present study. All strains, except XS strain from tomato plants, were collected from potato plants.

Species	Strain	Collection location	Coordinate	Date	Stage
<i>Phthorimaea operculella</i>	ML	Malong District, Qujing City	103°34'50"; 25°16'24"	April, 2023	Larva
	LL	Luliang County, Qujing City	103°40'48"; 25°9'51"	April, 2023	Larva
	XW	Xuanwei City, Qujing City	104°04'28"; 26°05'52"	August, 2023	Larva
<i>Phthorimaea absoluta</i>	PL	Panlong District, Kunming City	102°44'56"; 25°7'42"	April, 2023	Larva
	GD	Guandu District, Kunming City	102°56'51"; 25°10'40"	April, 2023	Larva
	XS	Xinshi District, Urumqi City	87°29'47"; 43°57'6"	August, 2023	Larva