

Table 1 The sources, functions and characteristics of *B. tequilensis*

Strain number	Sources	Functions/Characteristics	References
X-16	"Meizao" sweet cherry	Addresses the rot issue in "Meizao" sweet cherry, potential for a new preservation technique	(Xi et al., 2020)
wm031	Tomato	Inhibits nine plant pathogens, including <i>Fusarium oxysporum</i> (tomato wilt), <i>Sclerotinia sclerotiorum</i> (rape sclerotinia), <i>Fusarium oxysporum</i> f. sp. <i>niveum</i> (watermelon wilt), and <i>Phytophthora capsici</i> (pepper blight)	(Zhang et al., 2017b)
DU-1	Rhizosphere soil of rehmannia	It exhibits antagonistic activity against <i>Fusarium oxysporum</i> f. sp. <i>radicis rehmanniae</i> , effectively alleviating the continuous cropping obstacle in Rehmannia cultivation	(Du, 2020)
B-23	Rhizosphere soil of peach tree	It exhibits antibacterial activity against the pathogen of peach brown rot (<i>Monilinia fructicola</i>)	(Yuan et al., 2018)
RA1402	Rhizosphere soil of sorghum	It can serve as a biocontrol strain against sorghum aphids	(Zhang et al., 2017a)
36	Rhizosphere soil of cycad	Enhances the aroma, taste, and color of fermented tea; ensures stable tea quality and unique flavor	(Li et al., 2018)
CD36	Rhizosphere soil of cycad	Alleviates stress from heavy metals (Ni ²⁺ , Pb ²⁺), enhancing phytoremediation efficiency	(Li, 2018b)
JS5L、JS20H	Soil of fusarium-damaged wheat	Inhibits <i>Fusarium graminearum</i> , reducing Fusarium head blight in wheat	(Wang et al., 2017)
HS10	Rhizosphere soil of peanut	Increases soil IAA content, promoting root growth and development	(Zhang et al., 2016)
JN-369	Susceptible rice variety (Xiangzaocan 24)	In addition to its significant inhibitory effect against the rice blast fungus (<i>Magnaporthe oryzae</i>), it can also inhibit plant pathogenic fungi such as <i>Colletotrichum capsici</i> (causing anthracnose in chili) and oomycetes	(Zhou et al., 2019)
KC121	Lanping tailings	It can simultaneously inhibit four types of <i>Fusarium</i> species, including <i>Fusarium proliferatum</i>	(Fan et al., 2021)
LY31	Esophagus of duck under modified atmosphere packaging	As the predominant spoilage bacterium in the esophagus of marinated duck under modified atmosphere packaging	(Li et al., 2020)
LSG3-6	Intestines of <i>Rattus norvegicus</i>	It exhibits strong bile salt tolerance and has a high inhibitory effect on the adhesion of <i>Aeromonas hydrophila</i>	(Wu, 2020)
CC2FG2	Rectal feces of geese	Acid and bile salt tolerant	(Wei et al., 2022)
DZY6715	Healthy oil tea leaves	Effectively inhibits pathogens causing diseases in oil tea leaves	(Zhou et al., 2023)