

VERSION: 1.1	DATE: 2022
PATHOGEN: <i>Pseudomonas syringae</i> pv. <i>glycinea</i> (syn: <i>Pseudomonas amygdali</i> pv. <i>glycinea</i>)	
HOST: Soybean (<i>Glycine max</i>)	
COMMON NAME: bacterial blight	
METHOD: Sb 4.1 Soaked bulk seed – Biochemical confirmation (Chauveau, 1988) (formerly Sb 2.1)	
METHOD CLASS: STANDARD (A)	
SAMPLE: 5,000 seeds	

REVISION HISTORY: Version 1.1: 2.21.2022 Updated King’s B Medium.

PROCEDURE:

1. Five subsamples of 1000 soybean seeds are soaked for 24 hr at 4-5°C in 600 ml of sterile tap water adjusted to pH 6.5 with a phosphate buffer solution.
2. Threefold serial dilutions are made from the soaking solution and 0.1ml aliquots plated on King’s B medium amended with cephalexin (KBC).
3. After incubation at 25°C for 2-3 days, presumptive colonies of *P. s. glycinea*, exhibiting a blue fluorescence under UV light (370 nm), are re-isolated onto KBC.
4. Five presumptive colonies of each subsample are subculture onto King’s B medium.
5. These subcultures are then confirmed as *P. s. glycinea* by a positive reaction for levan production and negative reactions in oxidase and esculin hydrolysis tests.

MEDIA:**King's B Medium**

DI water	1 liter
Proteose peptone #3	20g
K ₂ HPO ₄ (anhydrous)	1.5g
Glycerol	15ml
MgSO ₄ * 7H ₂ O	1.5g
Agar	20g

*4ml cephalixin from the stock solution per liter applied after autoclaving. (Stock = 1g per 100ml water)

Esculin Hydrolysis Agar

DI water	1 liter
NH ₄ H ₂ PO ₄	0.5g
K ₂ HPO ₄	0.5g
MgSO ₄ * 7H ₂ O	0.2g
NaCl	5g
Yeast Extract	5g
Ferric ammonium citrate	0.5g
Esculin	1g
Agar	12g

*pH should be about 6.8

Levan Agar

DI water	1 liter
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Sucrose	50g
Nutrient agar	23g

REFERENCES:

Chauveau, J. F. 1988, personal communication