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***Rhizoctonia solani* Kuhn**

***Burkholderia cepacia* (ex. Burk) Yabucchi**

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(// : // :)

Rhizoctonia solani

Burkholderia (Pseudomonas)

cepacia

B. cepacia

B. cepacia

Burkholderia

TB-T

YDC

B. cepacia

R. solani

B. cepacia

R. solani

B. cepacia

(CF)

Rhizoctonia solani Burkholderia cepacia

.()
Holmes Palleroni

rRNA II

Pseudomona
Burkholderia

B. cepacia

(genomovar)

(genomic species)

.()

IV

(CF)

(*B. cepacia* genomovar VII) *B. ambifaria*

) *B. cepacia* .()

CF *B. vietnamiensis* (III)

.()

B. vietnamiensis

.()

Burkholderia

.()

Burkholderia

.()

.()

Burkholderia

Pseudomonas *Bacillus*

Agrobacterium *Xanthomonas* *Pantoea*

.()

Rhizoctonia solani

.()

Burkholderia (*Pseudomonas*) *cepacia* (ex.Burk)
Yabucchi

.()

(Cystic fibrosis)

CF

B. cepacia .()

(sour skin)

.()

.()

.()

B. cepacia

.()

Burkholder

Rhizoctonia solani Kuhn

:

:

() *R. solani*

R. solani () *Aphanomyces* *Pythium*

Fusarium moniliforme ()

()

NA

TB-T

()

()

() *Rhizoctonia solani*

() *Sclerotinia sclerotiorum*

() *Botrytis cinera*

Burkholderia

()

()

B.cepacia

()

()

Burkholderia

TB-T

TB-T

()

()

B. cepacia

B. cepacia

R. solani

R. solani

sour skin

()

x

()

()

(Skim milk agar)

/

(cfu)

P. fluorescens

()

()

Bacillus subtilis

)

(

()

(Chrome Azurol S) CAS

()

(*R. solani* AG-4)

()

()

Rhizoctonia solani Kuhn

Burkholderia

()

B. cepacia

Burkholderia

()

(

/

R. solani

B. cepacia

TB-T

TB-T



Burkholderia

B. cepacia

YDC

()

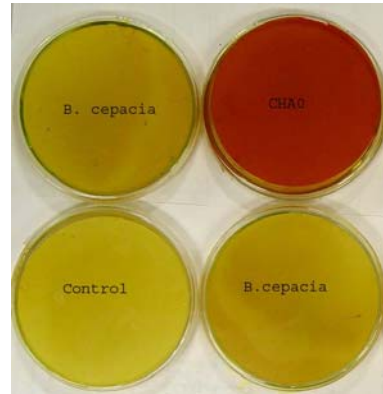
CAS

Pf-2 ()

Pf-2

()

R. solani



B. cepacia

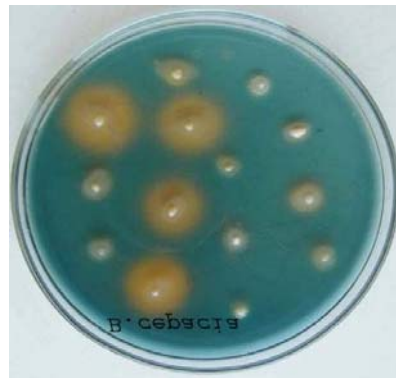
Pf-26 *B. subtilis*

Pf-1

Pf-17 Pf-3

Pf-2

()



CAS

Pf-26 *B. subtilis*

Pf-1 *B. cepacia*

Pf-17 Pf-3

Pf-2

()

B. cepacia Pf-26 *B. subtilis*

) Pf-17 Pf-3

Pseudomonas fluorescens

Pf-26 Pf-1 *B. cepacia* *B. subtilis* (

Pf-17 Pf-3

Pf-1

Pf-2

Pf-2

Pf-26 *B. subtilis* *B. cepacia*

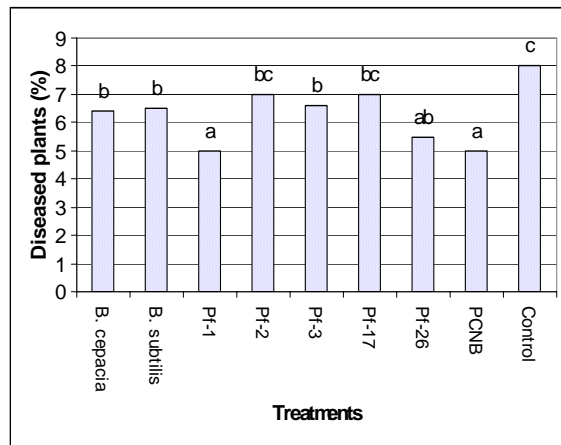
()

sour skin

()

Burkholderia cepacia
(complex)

R. solani
B. subtilis
P. fluorescens *B. cepacia*
Pf-1 PCNB
Pf-26 Pf-3 *B. cepacia* *B. subtilis*
(b) (ab)
Pf-17 Pf-2



B. cepacia

PCNB
(stand)

Burkholderia

Burkholderia cepacia

TB-T

| <i>Burkholderia cepacia</i> | | (T) | (TB) |
|---|--------------------|-------------------------|--------------------|
| Levan | + | TB-T | () |
| Oxidase | + | | |
| Nitrate reduction | + | | |
| Potato rot | + | | |
| Anaerobic growth on glucose | - | | |
| Arginin dehydrolase | - | | |
| HR | - | | |
| Growth at 4 ^o C | + | | |
| Growth at 41 ^o C | + | | |
| Growth at 3% NaCl | + | | |
| Gelatin hydrolasis | - | - | <i>B. cepacia</i> |
| Starch hydrolasis | - | <i>B.</i> | |
| Pyocyanin | + | | |
| Colonies yellow on YDC | - | TB-T | <i>cepacia</i> |
| Colonies mucoid on YDC at 30 ^o C | - |) | () |
| Utilization of | | | (|
| L-arabinose | + | | <i>B. cepacia</i> |
| L-valine | + | | |
| D-galactose | + | | |
| D-sorbitol | + | | |
| Trehalose | + | | |
| Sorbitol | + | - | |
| Glycine | v | | |
| M-Inositol | + | | |
| Sucrose | + | | <i>B. gladioli</i> |
| β-alanine | + | | <i>B. cepacia</i> |
| Adonitol | + | | |
| Lactose | v | | |
| D-tartrate | - | | |
| Sodium tartarate | - | | |
| Growth at pH 4 | + | <i>B. gladioli</i> | <i>B. cepacia</i> |
| Growth at pH 8 | + | | |
| Growth at pH 9 | - | | |
| Diffusible non-fluorescent pigments on KB | + | <i>B. caryophylli</i> | <i>B. cepacia</i> |
| V:21-79% | | | |
| | <i>B.cepacia</i> | <i>B. glumae</i> | <i>B. cepacia</i> |
| | | <i>B.</i> | |
| | <i>R. solani</i> | <i>B.</i> | <i>cepacia</i> |
| | | | <i>plantarii</i> |
| <i>P. fluorescens</i> | <i>B. subtilis</i> | | |
| | | () <i>Burkholderia</i> | |
| | | | <i>B. cepacia</i> |

| | () | () | () | () |
|------------------------|-----|-----|-----|-----|
| <i>B. cepacia</i> | / | A | / | b |
| <i>B. subtilis</i> 126 | / | A | / | a |
| Pf-1 | / | B | / | cd |
| Pf-2 | / | C | / | c |
| Pf-3 | / | Ab | / | b |
| Pf-17 | / | Ab | / | b |
| Pf-26 | / | A | / | a |
| (control) | / | B | / | c |

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