|  |  |
| --- | --- |
| Logo AGES | |
| Bacterial ring rot in potato | |
|  |  |
| 14.03.2025 13:48 Uhr | |

**Bacterial
ring
rot
in
potato**

**Clavibacter
sepedonicus
(synonym:
Clavibacter
michiganensis
ssp.
sepedonicus)**

Last
change:
25.05.2023

**Profile**

Bacterial
ring
rot
of
potato
is
caused
by
the
bacterium
*Clavibacter
sepedonicus*
and
poses
a
high
potential
threat
to
potato
production
worldwide.
*Clavibacter
sepedonicus*
is
listed
as
a
[Union
quarate
pest](https://www.pflanzenschutzdienst.at/geregelte-schaedlinge/)
.

**Damage
symptoms**

On
infected
potato
plants
under
European
climatic
conditions,
symptoms
in
field
stands
usually
appear
towards
the
end
of
the
season.
Infected
plants
show
signs
of
wilting
and
the
leaf
margins
curl
upwards.
Subsequently,
chlorosis
or
necrosis
often
develop
on
the
leaves.
As
the
disease
progresses,
the
leaves
dry
out
from
the
edges
and
entire
stems
may
die.
Symptoms
can
easily
be
confused
with
symptoms
of
other
wilt
diseases
or
overlaid
by
other
diseases
and
therefore
overlooked.

On
infected
potato
tubers,
a
slight
glassiness
or
yellowing
of
the
vascular
ring
is
initially
evident
when
the
tubers
are
cut
lengthwise,
especially
in
the
area
of
the
umbilical
end.
As
infection
progresses,
the
vascular
tissue
is
destroyed
and
the
vascular
ring
turns
brown.
When
light
pressure
is
applied
to
infected
tubers,
a
pale,
pulpy
substance
oozes
from
the
vessels.
Later,
browning
appears
on
the
tuber
surfaces
in
the
area
of
the
eyes,
as
well
as
cracks
in
the
skin.
However,
the
tubers
are
often
latently
infested,
i.e.
they
do
not
show
any
symptoms
of
damage.

**Host
plants**

The
potato
is
the
most
important
host
plant.

**Distribution**

*Clavibacter
sepedonicus*
is
found
worldwide.

**Propagation
and
transmission**

One
of
the
most
important
sources
of
infection
is
diseased
or,
above
all,
latently
infected
and
thus
apparently
healthy
planting
material.
The
pathogen
can
also
survive
on
plant
residues
in
the
soil.
Infected
potatoes
that
have
grown
through
represent
a
further
risk
of
infection.
During
planting,
harvesting,
grading,
transport,
and
storage,
infection
of
healthy
tubers
can
occur
through
contact
with
infected
tubers
or
contaminated
equipment
and
storage
facilities.
When
tubers
are
washed
for
consumption,
bacteria
from
diseased
tubers
can
enter
the
wash
water.

**Economic
importance**

Bacterial
ring
rot
causes
major
damage,
particularly
in
North
America
and
Canada.
In
the
EU,
the
disease
occurs
sporadically
in
individual
member
states.
On
the
one
hand,
infestation
causes
yield
losses
due
to
reduced
growth,
reduced
tuber
set
and
the
death
of
plants.
On
the
other
hand,
the
quality
of
the
harvested
crop
is
reduced
due
to
the
rotting
of
the
tubers,
in
particular
also
due
to
secondary
rotting
pathogens.
In
addition,
when
bacterial
ring
rot
occurs,
the
farms
affected
have
to
take
extensive
measures,
some
of
which
may
be
associated
with
high
costs.

**Prevention
and
control**

* Use
  of
  certified
  planting
  material
* Infestation
  control
  towards
  the
  end
  of
  the
  growing
  season
  (best
  time:
  from
  mid-July
  until
  full
  maturity)
* Destroy
  potato
  overgrowth
  on
  possibly
  infested
  areas
* Establishment
  of
  closed
  cycles
  in
  the
  potato
  processing
  industry
* Adherence
  to
  a
  crop
  rotation
  of
  at
  least
  three
  to
  four
  years

**Phytosanitary
status**

*Clavibacter
sepedonicus*
is
listed
as
a
[Union
aquatic
pest](https://www.pflanzenschutzdienst.at/geregelte-schaedlinge/)
and
is
thus
subject
to
legal
regulations
to
prevent
its
introduction
and
spread
into
or
within
the
member
states
of
the
EU.

**Links**

[EPPO
database](https://gd.eppo.int/taxon/CORBSE/documents)

**Services**

[Plant
Health
Services](en/plant/plant-health/plant-health-information)