|  |  |
| --- | --- |
| Logo AGES | |
| Apple snails | |
|  |  |
| 08.05.2024 13:13 Uhr | |

**Apple
snails**

**Pomacea**

Last
change:
11.09.2023

**Profile**

Apple
snails
are
often
kept
in
aquariums
and
feed
on
aquatic
plant
species.
However,
they
are
also
a
problem
in
rice
cultivation
and
must
not
be
imported
or
distributed
in
the
EU.

**Appearance**

Apple
snails
are
characterized
by
large,
round
snail
shells
that
have
a
thin
shell
cover.
In
addition
to
the
long
antennae
above
the
eyes,
there
is
a
second
pair
of
antennae
on
the
mouth.
Since
apple
snails
belong
to
the
lung
snails,
they
have
to
fill
up
their
air
supply
about
once
an
hour.
To
get
air
they
form
a
skin
fold
on
the
side
of
the
body
to
a
closed
tube
which
they
stretch
to
the
water
surface.

**Biology**

Apple
snails
are
separately
sexual.
The
females
cannot
fertilize
themselves
and
no
young
snails
hatch
from
unfertilized
eggs.

Apple
snails
are
adapted
to
the
dry
periods
that
occur
in
the
tropics.
If
necessary,
these
snails
can
burrow
into
moist
soil
and
close
the
lid
of
their
shell.

**Damage
symptoms**

Because
apple
snails
cut
plant
stems
below
the
water
level,
the
first
symptom
of
damage
to
rice
is
reduced
plant
growth.

**Host
plants**

The
main
food
source
of
apple
snails
are
aquatic
plant
species,
and
here
they
have
a
wide
host
plant
spectrum.
When
food
is
scarce,
they
also
feed
on
algae,
detritus,
small
crustaceans,
fish
spawn,
etc.
In
Asia,
introduced
apple
snail
species
threaten
the
biodiversity
and
functionality
of
aquatic
ecosystems
(see
[EFSA
risk
assessment](https://efsa.onlinelibrary.wiley.com/doi/pdf/10.2903/j.efsa.2013.3487)).
In
the
EFSA
risk
assessment,
the
potential
impact
on
the
environment
in
the
EU
is
assessed
as
massive.
In
addition
to
marsh
and
aquatic
plants,
Pomacea
species
also
eat
rice.

**Distribution**

The
family
of
apple
snails
or
Ampullariidae
originates
from
South
or
Central
America
and
occurs
worldwide
in
many
tropical
and
subtropical
regions,
as
well
as
temperate
regions
(e.g.
in
Argentina
and
in
Japan).
Species
of
the
genus
*Pomacea*
are
often
kept
in
aquaria.

Climatic
comparisons
of
the
southernmost
range
in
Paso
de
las
Piedras
(Argentina)
with
Europe
show
extensive
climatic
similarity
(>80%)
with
southern,
western
and
parts
of
central
Europe,
especially
if
a
warming
of
+2
°C
from
the
1961-1990
average
climate
values
is
assumed
(see
[EFSA
Opinion](https://efsa.onlinelibrary.wiley.com/doi/pdf/10.2903/j.efsa.2012.2552)).
EFSA
therefore
assesses
the
risk
of
establishment
in
river
courses
and
channels
in
the
areas
at
risk
as
high.

There
is
uncertainty
regarding
the
possible
northern
limit
of
spread
of
the
apple
snail
in
Europe.
The
tightly
fitting
gill
cover
allows
the
snails
to
survive
unfavorable
conditions
(drought,
cooler
periods)
for
several
months.
In
the
northernmost
distribution
area
of
Japan,
*P.
canaliculata*
hibernates
at
water
temperatures
of
2
°C
in
the
sediment
of
watercourses.

Details
of
the
current
distribution
range
can
be
found
here:

[*Pomacea
insularum*](https://gd.eppo.int/taxon/POMAIN/distribution)[*Pomacea
canaliculata*](https://gd.eppo.int/taxon/POMACA/distribution)

**Propagation
and
transmission**

Spread
by
natural
means:

* Small-scale
  through
  the
  active
  foraging
  of
  snails.
* Locally
  by
  water
  currents

Human-induced
spread:

* Trade
  in
  snails
* "Disposal"
  from
  aquariums
  into
  natural
  watercourses
  is
  thought
  to
  be
  the
  main
  route
  of
  dispersal
* Egg-laying
  on
  boat
  hulls
  led
  to
  the
  spread
  of
  the
  apple
  snail
  population
  in
  Asia;
  apple
  snails
  attached
  to
  boats
  have
  also
  been
  found
  in
  the
  Ebro
  Delta
* Trade
  in
  aquarium
  plants
  to
  which
  egg
  clutches
  adhere

**Economic
importance**

The
economic
damage
to
agricultural
crops
is
mainly
limited
to
rice
cultivation,
where
the
apple
snail
is
a
feared
pest.

**Prevention
and
control**

The
Official
Plant
Protection
Services
of
the
Federal
Provinces
are
responsible
for
carrying
out
controls
to
ensure
compliance
with
the
measures
described
in
their
territory.
In
case
of
a
suspected
occurrence
of
the
apple
snail
in
waters
in
Austria,
this
must
be
reported
to
the
[Official
Plant
Protection
Service
of](https://www.pflanzenschutzdienst.at/kontakte-bundeslaender/)
the
federal
state.

**Phytosanitary
status**

With
the
implementing
decision
2012/697/EU
of
08.11.2012,
the
European
Commission
has
taken
protective
measures
to
prevent
the
introduction
and
spread
of
snails
of
the
genus
*Pomacea*
in
the
EU.
The
protective
measures
include
both
an
import
ban
on
snails
of
the
genus
*Pomacea*
and
movement
restrictions
on
planting
material
that
can
only
grow
in
water
or
in
soil
that
is
permanently
saturated
with
water.

**Specialized
information**

**Why
were
protective
measures
imposed?**

In
2009,
the
apple
snail*(P.
insularum*)
was
found
in
the
Ebro
delta
in
the
province
of
Tarragona
in
Catalonia
(Spain),
and
the
following
year
also
in
rice
fields.
It
spread
rapidly
and
colonized
about
600
ha
of
rice
fields
(20
km
along
the
Ebro
River
and
130
km
along
irrigation
canals,
respectively)
in
October
2011.
(see
also
[EPPO
Global
Database](https://gd.eppo.int/reporting/article-1866)).
In
2011,
the
Spanish
authorities
took
emergency
measures
-
based
on
a
national
risk
assessment
-
to
prevent
further
introduction
and
spread
of
the
apple
snail.
On
behalf
of
the
EU
Commission
and
based
on
the
Spanish
risk
assessment,
EFSA
prepared
a
scientific
opinion
on
the
risk
of
the
apple
snail
for
the
EU
in
spring
2012.

EFSA
Panel
on
Plant
Health
(PLH);
[Scientific
Opinion
on
the
evaluation
of
the
pest
risk
analysis
on
Pomacea
insularum,
the
island
apple
snail,
prepared
by
the
Spanish
Ministry
of
Environment
and
Rural
and
Marine
Affairs](https://efsa.onlinelibrary.wiley.com/doi/abs/10.2903/j.efsa.2012.2552).
EFSA
Journal
2012;10(1):2552.
[57
pp.]
doi:10.2903/j.efsa.2012.2552.

**Specific
requirements
for
importation
into
the
EU.**

Snails
of
the
genus
*Pomacea*
may
not
be
imported
into
the
EU.

In
addition,
planting
material
(excluding
seeds)
of
plants
that
grow
only
in
water
or
in
soil
permanently
saturated
with
water
(e.g.
aquarium
plants)
may
be
imported
into
the
EU
only
if
a
phytosanitary
certificate
has
been
issued
for
the
consignment.
This
must
confirm
that
the
plants
were
inspected
immediately
prior
to
export
and
found
to
be
free
of
the
apple
snail.
In
addition,
the
plants
are
subjected
to
a
health
inspection
at
the
place
of
import
(in
particular,
inspection
for
apple
snail
eggs).

**Conditions
for
movement
in
the
EU**

The
movement
(trade)
of
apple
snails
in
the
EU
is
prohibited.

Aquarium
plants
originating
from
demarcated
areas
(=
infestation
areas
of
the
apple
snail
within
the
EU)
require
a
plant
passport
for
movement
to
non-demarcated
areas.

Note
that
the
requirements
for
import
and
movement
concern
all
species
of
the
genus
*Pomacea*
.

**Services**

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