

## Strawberry green petal disease: beautiful symptoms, devastating disease

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USA and Mexico are among the top five strawberry (*Fragaria x ananassa*) producers worldwide. Argentina, Chile and other Latin American countries are also important strawberry producers, reason why the pest and disease surveillance in temperate and tropical regions is key to keep a high productivity. Strawberry plants are affected by many plant diseases. Among them, the strawberry green petal disease (SbGP), associated with phytoplasmas, has been reported in Latin America.

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The SbGP disease was first detected in 1959, in Central Europe. Since then, it has been reported in Canada, the Czech Republic and Italy, typically associated with phytoplasmas of the aster yellows ('Ca. Phytoplasma asteris') group.

In the USA, phytoplasma associated diseases affecting strawberry plants have also been reported, while in Latin America, the SbGP disease was first reported in Argentina. Furthermore, in Mexico, the SbGP has been associated to a particular group of phytoplasmas, known as the Mexican periwinkle virescence group, which was first identified in another plant species, *Catharanthus roseus*. Until now, this group of phytoplasmas has only been reported in the Americas, therefore, the species grouping the strains has been named 'Ca. Phytoplasma hispanicum'.

As the name suggests, the distinctive characteristics of the SbGP disease include a change of color in the flower petals, from white to green, along with fruits showing green structures that give the appearance of a large green flower. Another characteristic symptom is the presence of red leaves and the formation of leaves in the fruit, which renders the fruit inedible

and not viable for commercial sale. No doubt that the affected fruit is really beautiful and looks like something out of this world, but the presence of such strangeness in a field is a sign of concern more than appreciation.

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### Images

Strawberry green petal disease symptoms. Source: Edel Pérez-López

### References

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