Collecting and publishing data on organisms harmful to plants in Slovenia

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On behalf of each IPPC Contracting Party a National Plant Protection Organization (NPPO) implements international obligations.

NPPO provides for the systematic collection of information obtained through the surveillance and field surveys for analysing pest status, for pest reporting and for adopting plant health measures, where appropriate.

In Slovenia AFVSPP provides for the coordination and exchange of information between authorities, public researchers and extension services, and for reporting on any new potential quarantine organisms and regulated pests.

The obligation of sharing important plant health information is laid down in national legislation, incorporating inter alia the ISPM 17 international standard.

Geographic information system (GIS) is integrated part of Phytosanitary information system administered by AFVSPP.

Since 2000 several useful databases have been used in usual process of GIS in the Phytosanitary information system:

- a farm register - Land Parcel Information System (LPIS; in Slovene: GERK),
- digital cadastral system,
- database of actual use of agricultural land,
- registers of permanent crops (vineyards, orchards, hop fields),
- register of producers, traders and importers of planting material and other plant goods with a high risk of transmission of harmful organisms (AFVSPP).

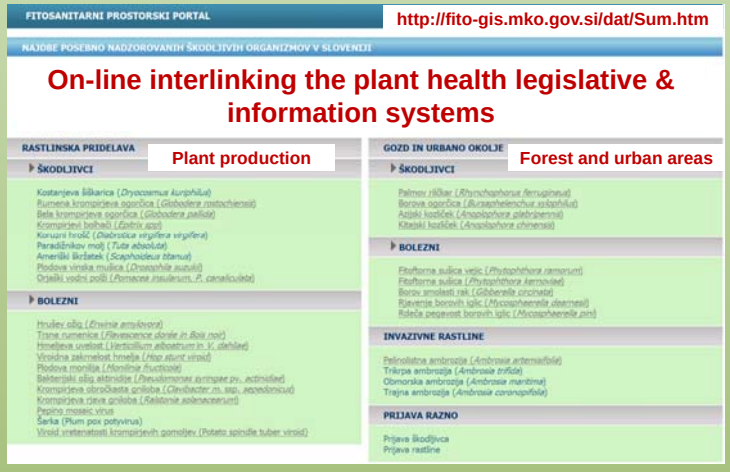

Figure 1: **Phytosanitary spatial portal** enables to any registered user reporting a finding or an outbreak using on-line submission form. For surveys inquiries are launched via this screen.

Spatial component of the data is the main attribute of GIS. With different GIS tools spatial data could be :
- processed - analyzed
- managed - visualized and used.

With regard to quarantine pests status official measures of eradication, containment or prevention of spread have been enforced in delimited areas of foci and their buffer zones. Spatial analyzes are usually used for efficient management strategy.

Diabrotica virgifera virgifera suppression program

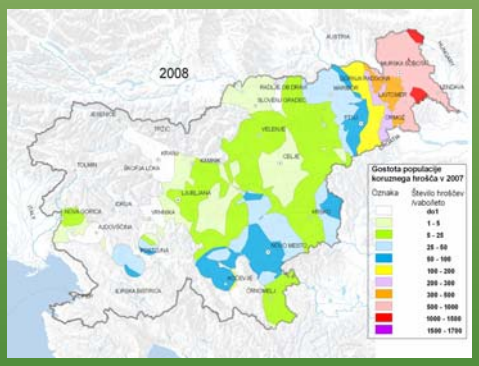

Figure 2: ***Diabrotica virgifera virgifera*** Population density of Dvv at the end of 2007.

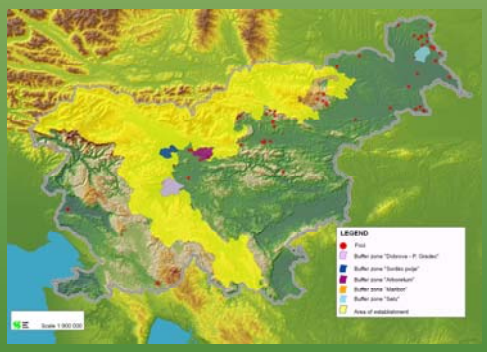

Figure 3: Establishment of demarcated areas with different status in management program of *Erwinia amylowora* (situation since 2008).

Erwinia amylowora management program

- managing different demarcated areas
- determination of prohibited area for bee transfer as phytosanitary measure (endangered area determinated based on location of intensive orchards and nurseries)

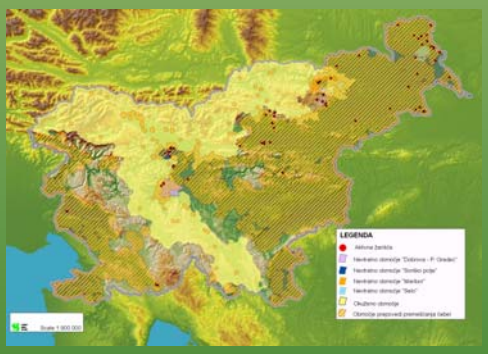

Figure 4: Determination of areas where transfer of bee hives is prohibited, unless bees undergo quarantine isolation for 48 hours as a containment phytosanitary measure .

Grapevine Flavescence dorée management program

Vine growers in foci were notified on obligation of vector treatment and limitations of using certain insectide due to too small distance from rivers and other sensitive environment.
Together with GIS, new technologies (remote sensing of satellite images) are trying to implement more targeting survey.

Figure 5: Intersection of databases for notification of vine growers in foci of Grapevine FD yellows.

Monitoring from the space

Figure 6: Multispectral satellite image of demarcated area for Grapevine FD followed by analysis of satellite image through different spectral indices