"Vinschgau: Cultural Region in South Tirol" – this advertisement promotes a cultural landscape in northern Italy that has developed over the last 1000 years. The region represents the longest valley of the Alps in the east-west direction, and has large fruit-growing areas in front of an impressive mountain scenery.

As this fruit-growing business has been intensified, so has the use of pesticides, which has been the cause of substantial conflicts. An upcoming referendum should put a stop to the expansion of the fruit mono-cultures.

For years, the Umweltschutzgruppe Vinschgau / Environmental Group of the Vinschgau Valley has been watching with concern the increase of the intensive fruit growing business in the upper valley, which, as a consequence, is threatening organic farms, farmers of agriculture and livestock, and also changing the cultural landscape of the region in a negative way. Two organic farms were forced to close their doors already, and others may have to follow soon. Organic farmers with livestock are not able to feed hay to their animals any longer because pesticides used by neighboring farmers are carried by the winds to their own fields, and are therefore contaminating the hay. These windy conditions are typical for the area.

The Umweltschutzgruppe Vinschgau / Environmental Group of Vinschgau has commissioned the analysis of a sample taken from local hay, which revealed residues of 9 active substances in relevant amounts, among them dithiocarbamate, dithianon, chlorpyriphos, fluazinam, imidacloprid and penconazol.

The sample was taken from the immediate surroundings of the elementary school in Tartsch. The analytic results were presented to toxicologists Prof. Irene Witte of the University of Oldenburg and Prof. Hermann Kruse of the University of Kiel for their evaluation. Based on the results, Prof. Kruse was concerned about students and teachers being affected by the drifting pesticides through skin and respiratory tract.

In regards to the potential danger of the identified active substances of pesticides, Prof. Kruse warned that dithianon and fluazinam, both irritants and sensitising to the human body, are of special concern when carried onto the human skin via areosoles. Moreover, Kruse explained the neurotoxic effects of chlorpyriphos (e.g. increased headaches, vision problems, premature fatigue, problems concentrating) and penconazol (fatigue). He also pointed out the embryotoxic effect of dithiocarbamates, chlorpyriphos and imidacloprid. Prof. Witte especially emphasised the combined effect of copper and dithiocarbamates, both of which were found in the hay sample. (1)

The local politicians in charge support the traditional agricultural development and argue that anxiety among citizens is being generated for no good reason. They say that citizens are being told false facts and are becoming scared.

The local citizens however, are growing less accepting towards the arguments of the politicians.

In order to gather a valid impression of the general opinion of the people in the region regarding the development of the fruit-growing industry, the Umweltschutzgruppe Vinschgau / Environmental Group of Vinschgau commissioned in 2012 the Institute of Social and Public Opinion Research *apollis* to carry out a representative survey in the township of Mals. The result of the survey showed that a clear majority of the population was against the intensive fruit-growing industry and is in favor of prohibiting the use of dangerous pesticides. (2)

In view of the collective expression of opposition shown in this survey against the growing expansion of the chemical-intensive fruit cultivation, the Umweltschutzgruppe Vinschgau / Environmental Group of Vinschgau created a promotion committee in charge of a referendum.

In parallel to the initiative of the Umweltschutzgruppe Vinschgau / Environmental Group against the chemical-intensive fruit cultivation, the representatives of the initiative to promote Democracy are committed to improve the rights of codecision in the township of Mals. The synergistic effect of both initiatives has resulted in a legally binding referendum (with a quorum of 20%) that is soon to be held.

Not only has the Umweltschutzgruppe Vinschgau / Environmental Group of Vinschgau been supporting the referendum, they also have implemented a variety of measures such as the aforementioned analysis of pesticide residues in hay, specialized research, presentations and press events.

The variety, intensity and thorough investigation of the activities has led to an increased interest in the community, and the debate about the development of the cultural landscape and the agricultural production methods has increasingly become of public interest. This has also involved a broad variety of stakeholders and marked the beginning of a local citizens' initiative. In the meantime, the debate has spread throughout the South Tyrol region. The taboo of debating about the negative consequences of the intensive use of pesticides has been increasingly lessened.

Now that the second proposal for a referendum has been approved, citizens are anxiously awaiting its outcome. An exact date for the referendum 2014 still has to be established. There are several upcoming elections that could serve as dates for the referendum.

The polling question is: "Are you in favor of the implementation of the following amendment to the articles of the Township of Mals?

The precautionary principle with the objective to protect public health lays down that all precautions that help prevent hazard to the health of man and animal have to be taken. The township of Mals is specifically aiming to protect the health of its citizens and guests, to maintain the sustainability of nature and waters, as well as making it possible that different forms of economy can coexist in its territory in a fair and respectful way.

In conformance with these goals, Mals promotes the use of biodegradable plant protection within its municipal boundaries. A regulation will be issued that describes the details of this provision.

Independently from this provision, the use of highly toxic, as well as chemical-synthetic substances and herbicides, that are harmful to the health and the environment is prohibited within its municipal boundaries. The municipal authority is responsible for monitoring the implementation and the compliance of the referendum outcome.

Several action groups (PAN-italia, Hollawint, Adam&Epfl, Kornkammer, Heimatpflegeverein (club for regional environmental care and fostering of regional values and traditions) doctors, veterinarians, pharmacists and biologists ... are supporting the referendum by organising various events, which will take place during the next couple of months. The aim is to create public awareness for the risks involved in the application of pesticides for both professional and private use.

## Contact:

Eva Prantl, President Umweltschutzgruppe Vinschgau / Environmental Group Vinschgau, Email: prantl.eva(at)gmail.com

Koen Hertoge, Member of the board, PAN-italia Email: koen\_hertoge@hotmail.com

## Sources:

(1) Informationen und Auskünfte von Eva Prantl, Vorsitzende der Umweltschutzgruppe Vinschgau (2) apollis (2012): Folgen des zunehmenden Obstanbaus aus der Sicht der Bevölkerung - Methoden- und Tabellenband zu einer empirischen Untersuchung, Bozen (interne Projektnummer: 644)