

Padua 2017 Abstract Submission

I want to submit an abstract for:

Conference Presentation

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Keywords

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Research Question

What are the beliefs and concerns of winegrowers towards the use of cover crops?

Methods

Analyse qualitative data from two focus groups with a grounded theory approach to validate existing statistical data.

Results

Cover crops are an accepted management method. But water scarcity is a big issue against the usage which is reflected in the predominant bare soil in Spain.

Abstract

Depending on climatic conditions, cover crops (CC) can reduce the yield and the quality of grapes as CC are competitors for water and nutrients. This effect occurs in particular in unusual dry years (ROSA et al., 2013). Especially in semi-arid regions CC should be used with caution (MEDRANO et al., 2015, p. 499). This indicates, that inter-row vegetation can be a risk for the grape yield which leads to immediate economic consequences for winegrowers. Thus, hardly surprising, bare soil management is still common in European viniculture.

From an environmental point of view, bare soils are not a favorable management option. Literature shows that the use of CC benefits the biodiversity. ROSA et al. (2013) prove, that CC have a positive effect on soil aggregate stability. Moreover, CC have significant benefits for soil biota (VUKICEVICH et al., 2016).

The transeuropean VineDivers project analyses inter alia the socio-ecological influence of cover crops in vine production. Results of the data collection verify these literature results for our study regions. We compared the effects of different management styles of vineyards on ecosystems and ecosystem services in four European countries. The different management styles include bare soil, temporary and permanent cover crops as well as spontaneous vegetation in the inter-rows. Furthermore, we evaluated the economic implications of these management methods for the winegrowers.

Winegrowers (and other land users), are the most important stakeholders in order to implement environmental sensitive policies (HAUCK et al., 2016, p. 49). HAUCK et al. (2016) stress that they play a key role in supporting biodiversity since they decide over the management of the fields in the end.

Therefore, there is a need to collect and analyze the attitudes of winegrowers towards their management styles and the use of CC. This helps us to validate existing statistical data with individual perceptions in order to formulate acceptable policy recommendations. Besides the environmental benefits of CC, we should not forget that new measures might even be beneficial for the Winegrowers because they can encourage innovation which in general improves the competitiveness of vintners (PORTER and VAN DER LINDE, 1995, p. 98).

Methods and Materials

We evaluated the attitudes of winegrowers towards environmental sensitive management regimes with a participatory approach based on grounded theory. Grounded theory was introduced by GLASER and STRAUSS in the 1960s ((GLASER and STRAUSS, 1967) and describes how a theory can be developed through a structured data analysis. The data collection took place with homogenous focus groups of winegrowers in the regions of Anjou (France) and Montilla-Moriles (Spain).

Focus groups are a widely used qualitative method in social sciences to analyze the opinions and beliefs of people on a specific subject. This method is not only time and resource efficient it also enables scientists to involve stakeholders into the research process (SCHULZ et al., 2012, p. 7). CAREY and ASBURY note, these groups are “especially useful for exploring new topics and examining complex issues” (CAREY and ASBURY, 2016, p. 17). In small groups, guided by a moderator, the participants discuss about a certain topic. The participants should somehow be associated to the topic of the group. Commonly, the issue will be introduced beforehand, e.g. with a short presentation, to give an incentive for the discussion. As the purpose of the group is not to reach consensus but to gain knowledge about different opinions, the setting should encourage the participants to speak their mind freely (KRUEGER and CASEY, 2015, p. 2).

Discussion points were divided in three main parts (opening, key and ending questions) as suggested by KRUEGER and CASEY (2015). In the opening questions, we asked the participants for their names and their management practices in the vineyard. The key questions dealt with viticulture in the respective region in general and the Common agricultural policy (CAP). Finally, we asked what future prospects the winegrowers have and what they expect from the CAP. Additionally to the discussion we collected basic descriptive information about the participants and their business with a questionnaire. As participants, we choose Winegrowers from our research area regardless of whether they already provided experimental plots in their vineyards for the project or not. The discussions were recorded in writing by one of the local researchers and a German team member. Audio recordings were made additionally. The protocols and impressions from the group were discussed with the team afterwards. This material is the basis for the analysis.

First results and discussion

The focus groups revealed that the use of cover crops varies strongly in the different regions. Even though the literature shows that inter-row vegetation in semi-arid zones is possible, winegrowers in the area of Montilla-Moriles in Spain are reluctant. This seems to be a combination of a knowledge deficit towards inter-row management with vegetation as well as traditional knowledge and habits. The scarce knowledge was reflected in the questions which came up during the discussion. However, there was an overall interest of the winegrowers for this topic as well.

In the French region of Anjou the use of cover crops is already widespread. In comparison to Spain the area is marked by a higher water availability. Nevertheless, winegrowers experienced yield losses if the cover crops became rampant.

The results indicate that winegrowers are open for new management methods if the ecological and economic advantages are communicated clearly.

Literature

CAREY, M.A., ASBURY, J.-E., 2016. Focus Group Research. Routledge.

GLASER, B.G., STRAUSS, A.L., 1967. The discovery of grounded theory: strategies for qualitative research, Observations. Aldine, New York, NY.

HAUCK, J., SCHMIDT, J., WERNER, A., 2016. Using social network analysis to identify key stakeholders in agricultural biodiversity governance and related land-use decisions at regional and local level. *Ecol. Soc.* 21. doi:10.5751/ES-08596-210249

KRUEGER, R.A., CASEY, M.A., 2015. Focus Groups A practical Guide for applied research, 5 Rev ed. ed. Sage Publications Inc, Thousand Oaks, California.

MEDRANO, H., TOMÁS, M., MARTORELL, S., ESCALONA, J.-M., POU, A., FUENTES, S., FLEXAS, J., BOTA, J., 2015. Improving water use efficiency of vineyards in semi-arid regions. A review. *Agron. Sustain. Dev.* 35, 499-517. doi:10.1007/s13593-014-0280-z

PORTER, M.E., VAN DER LINDE, C., 1995. Toward a New Conception of the Environment-Competitiveness Relationship. *J. Econ. Perspect.* 9, 97-118.

ROSA, J.D., Mafra, A.L., Medeiros, J.C., Albuquerque, J.A., Miquelluti, D.J., Nohatto, M.A., Ferreira, E.Z., Oliveira, O.L.P. de, 2013. Soil physical properties and grape yield influenced by cover crops and management systems. *Rev.*

Bras. Ciênc. Solo 37, 1352–1360. doi:10.1590/S0100-06832013000500024

SCHULZ, M., MACK, B., RENN, O., 2012. Fokusgruppen in der empirischen Sozialwissenschaft: von der Konzeption bis zur Auswertung. Springer VS, Wiesbaden.

VUKICEVICH, E., LOWERY, T., BOWEN, P., ÚRBEZ-TORRES, J.R., HART, M., 2016. Cover crops to increase soil microbial diversity and mitigate decline in perennial agriculture. A review. Agron. Sustain. Dev. 36, 48.

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