

Your vineyard is just three steps away...

# Catalogue of enological services



VITI CULTURA is the first company in Poland offering fully specialised services related to vineyard establishment and wine production. We provide comprehensive services of vineyard design including: sourcing a suitable location, evaluating usefulness of the land and preparing the site for a vineyard as well as planting. We provide full spectrum vinegrowing and winemaking consultancy as well as the marketing and distribution assistance.

Our team constitutes of highly trained people with many years of experience in viticulture and wine production, who acquired and consolidated their wine-making and vine-growing expertise in vineyards and wineries all over the world. We did (and do) participate in the realisation of numerous projects across the Europe.

We are looking forward to work with you!



# Dear Clients,

Our offer has been divided into 7 sections which correspond to different stages of planning, establishing and subsequently running a vineyard and making wine. Therefore, we want to show how many steps should be taken and how much effort it requires in order to enjoy a perfectly prospering vineyard, which will provide stable, high quality yields and fulfil customers' expectations now and several years after planting. The life span of contemporary vineyards is about 20-25 years and such a perspective we have in mind when offering plantings to our Clients.

# 1. Vineyard design stage

- 1. Finding a suitable vineyard location
- 2. Land suitability assessment
- 3. Soil sampling
- 4. Vineyard conceptual design
- 5. Design consultation
- 6. Detailed vineyard realization design

We pay special attention to the vineyard design stage. Depending on the size and the significance of a design this stage lasts from a few weeks to a few months and in some cases up to a few years if different locations are required. This stage is extremely crucial for the future prosperity of a vineyard and the economic motives of its realization. We spare no effort, through a series of meetings and discussions with the Investors, to achieve the envisioned objective, i.e. a selection of the best terroir from the range of presented sites, which will subsequently be planted with grapevine varieties suitable for the location. It would be difficult to enumerate all the factors that affect the final shape of individual designs, but we try to understand the plans and intentions of the investors and to adapt them to market reality and local climate conditions. Whatever we do, we always strive for one objective - *the financial success of our Clients*. We are fully aware that only well-designed vineyards that are run in an appropriate and professional manner, and which benefit from the vine-growing experience in Poland and in countries of a similar climate, may be the key to success. Even if these conditions are met, it is not easy to achieve projected results in every climate. Nevertheless, we assist the vine-growers in achieving the best possible results. While shaping the final design, prior to planting and before some decisions become too difficult to reverse, we present to investors the different versions of the plantings and highlight the threats and opportunities. It is a kind of SWOT analysis but referring strictly to vine-growing. The final decisions are always taken by our Clients who choose which version should be implemented as the basis of the design.

The first step is *a land suitability assessment* for a future vineyard which is free of charge for sites of 1 ha and above. If the initial assessment is positive and the Investor expresses an interest in future cooperation, we proceed with soil sampling and the conceptual part of the design which results in *CONCEPTUAL DESIGN OF A VINEYARD*, including:

- analysis of a location, topography and macro-, meso-, and microclimate conditions,
- information on the soil structure as well as water and air conditions,
- historical conditions of the agriculture in the region and surrounding areas,
- the concept of growing different varieties along with preliminary parcelling suggestions,
- the concept of wine production with regards to a quantitative or qualitative approach,
- overall business plan,

2

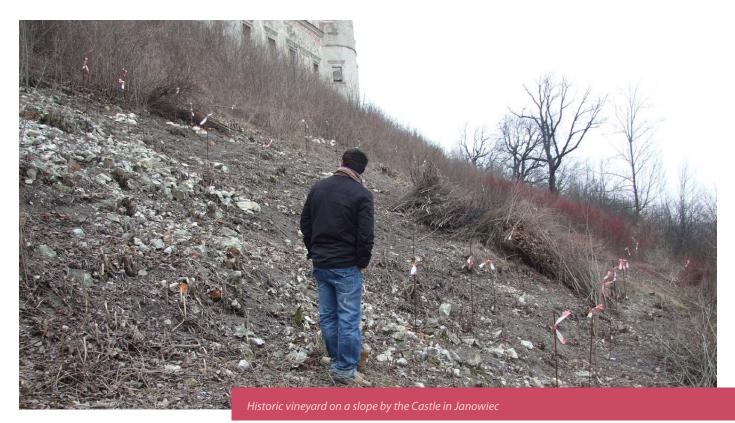
- other aspects of cultivation including manners of growing and suitable pole system selection.



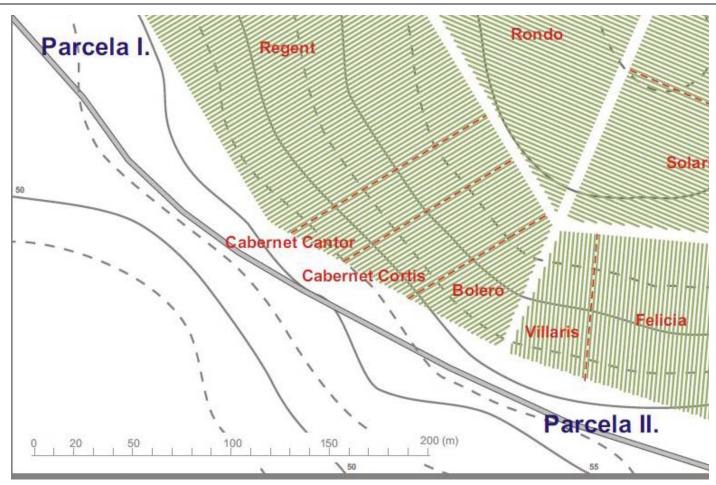


Hard copies of designs are devised by Wojciech Bosak, who is also an author of a number of publications and articles related to vine-growing. Such designs are always preceded by on-site visits and discussions with Investors which, depending on the subject scope, may be attended by one of or even all of our specialists. Following the consultancy stage, the consultants and the investor should reach full agreement over the design framework. The ultimate outcome of consultations is a document entitled *VINEYARD REALIZATION DESIGN*, which constitutes the basis for the final implementation.

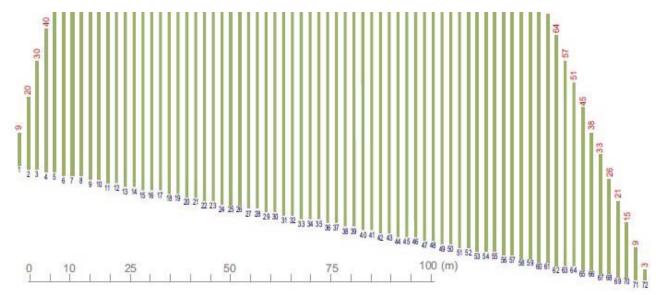
Below you can find materials and photographs included as parts of the conceptual and realization designs and planted vineyards.







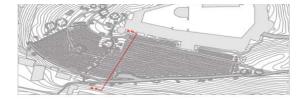
Pic. 1. Planting layout Scale 1:2000 Planted area: 7.7876 ha, 38938 grapevines



Pic. 4. Variety selection – parcel no.3. Scale 1:1000 Planted area: 1.3418 ha, 6709 grapevines Blue numbers – row number Red numbers – number of grapevines in a row

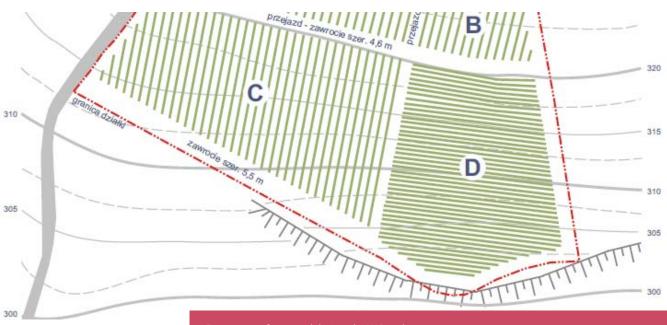


1



Vineyards of the Castle in Janowiec – reconstruction design Slope profile of a terraced vineyard (cross-section A-A) Investor: Nadwiślańskie Museum in Kazimierz Dolny Designed by: Wojcich Bosak (PIWiW), 2010

0 1 5 5 4 5 6 7 6 6 10 (m)



Fragments of vineyard designs by W.Bosak - 2012-2012





## 7. Detailed soil study and parcelling

For larger designs, of more than 5-10 ha, with visible and significant soil diversity, we suggest our Clients conduct a more thorough soil study. This means conducting a detailed study of soil profiles and taking a number of samples to determine floatable particles (partly also micronutrients). The number of samples varies from a few dozen to a few hundred depending on the size of a site and the diversity of potential parcels. Such an intensive study results in a written plan of the site parcelling with a clear diversification of the soil granulometric composition. The objective is to select suitable rootstocks individually for each parcel and to maximize the potential of the terroir in order to improve wine quality. Examples of studies and soil maps are presented below.

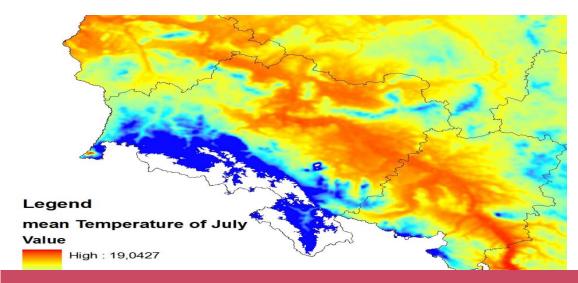


Srebrna Góra Vineyard, an excerpt from works of P.Gruba, 2009. Dozens of soil samples were taken in total from a land of about 10ha which resulted in a division of the site into 7 parcels with a clear soil diversification. Green colour – the amount of residual lime. In the realization design Viti Cultura has divided the site into 14 parcels related to variety/rootstock combination, hence matching the rootstocks to the soils presented in the picture and the varieties to their terroir requirements.

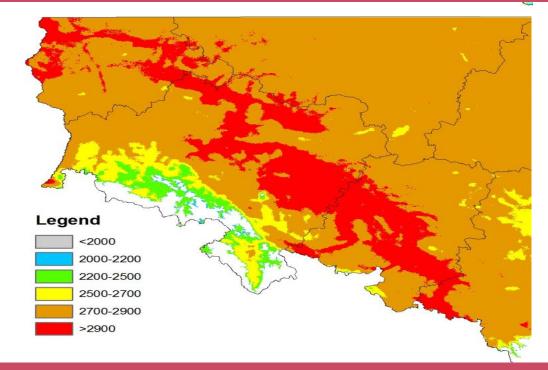


#### 8. Regional and terroir climate determination

In the relatively cold Polish climate the selection of a suitable location seems paramount. We offer a detailed study of regional climates, in addition to the climate analysis of a potential location, with the application of a numerical terrain model and with the possibility to elaborate the analysis so as to devise a terrain model of a vineyard. We base our analyses on extensive and up-to-date technical literature and public information from monitoring stations as well as aerial and satellite data. Providing it is possible to use local data (meteorological station or sensors), soil information or to elaborate the measurements, e.g. thanks to an Investor buying additional data (e.g. from the Institute of Meteorology and Water Management or paid-for aerial or satellite information), we may determine the climate for the whole site or even for individual parcels. A detailed plan may comprise of data gathered in tables or maps. (Below you can find examples of maps related to variability on a regional scale).



Spatial distribution of average temperatures in July (for the years 1996-2005)

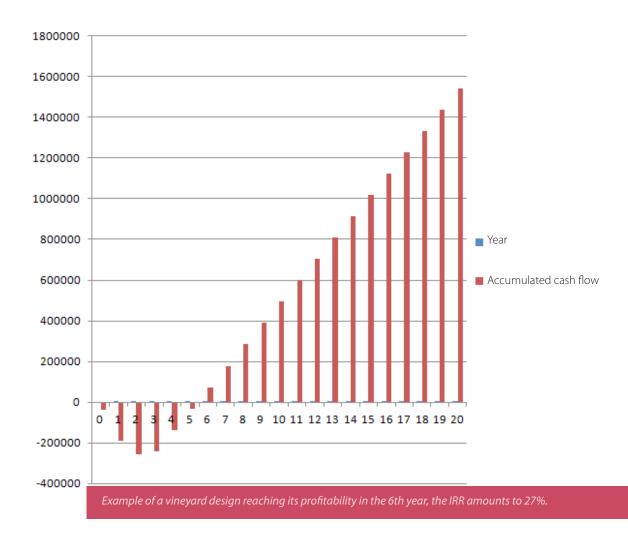


Distribution of average sums of active temperatures for the years 1996-2005, reclassification for vine varieties



#### 9. Detailed business plan

Vita Cultura suggests preparing detailed financial business plans for 20-25 years, especially to Investors who need elaborate designs due to the scale of the investment. Such business plans are prepared upon taking into consideration several scenarios, i.e. those of a pessimistic, typical and an optimistic nature. Every business plan contains IRR calculation – internal rate of return on investment, cash flow and the expected date for the return of invested funds. The data that constitutes the basis for our business plans comes from real figures spent to cover the ongoing cost of vine growing and equipment, and has been verified on numerous occasions with the expenses that vine-growers currently incur.



#### 10. European Union subsidies

We provide assistance and support in obtaining subsidies for a vineyard establishment. We are proud that we were able to help a few of our Clients to acquire funds from the RDP (Rural Development Programme) between 2007-2013. As part of the Farm Modernisation program our Clients received multiple subsidies, e.g. for the purchase of seedlings, posts and cultivation equipment, at a maximum amount of 300,000 Polish zloty.

#### 1. Site preparation



# 2. Vineyard realization stage

Depending on the elaboration of the soil study and the received recommendations, our specialists may modify or supplement the requirements related to the site preparation or its fertilization. One of the steps we highly recommend is deep ploughing in autumn and then aligning the field in spring to prepare an even surface for a future machine planting. In the case of fallow or overgrown with bushes fields, we usually need several years to bring a field to a desired state before planting. For Viti Cultura Clients this service is free of charge.

# 2. Ordering grafted vines and supplying the plants.

The experience of hundreds of Polish vineyards shows that in the Polish climate an extremely important issue is the achieving of stable yields. Without this basic foundation, business plans fail to hit projected results and the investments often turn out to be insufficiently profitable, undeniably not to the extent the vine-growers had anticipated before the investment. This means that the selection of less common varieties, which are outside the mainstream of vine planting in typical vine-growing countries, seems justified and sometimes necessary.

What we have in mind are new, resistant varieties, known in short as "PIWI" (e.g. Rondo, Regent or Solaris), or older hybrids which give high quality wines (Leon Millot or Seyval Blanc) that are more reliable in Poland than commonly grown Vinifera varieties. There are currently at least a dozen varieties that give relatively high quality wines which are acknowledged and valued by Polish consumers. Due to the somewhat low popularity of these varieties in Europe (although increasing in popularity) their planting material is quite uncommon and rarely selected, therefore some of them may be available on just one rootstock and some are grafted only for special orders. We maintain a professional, healthy relationship with vine-growers of resistant varieties, including four institutions in Germany which hold the exclusive production rights of such varieties, which enables us to provide a wider range of seedlings in addition to those commonly available on the market. However, such plants may only be delivered for special orders that are placed at least one year in advance to give sufficient time to take scions from mother-plants to produce grafted plants in time for planting. Contrary to popular belief, we do not exclude the growing in cool climate of classic vine varieties such as Riesling, Traminer or Pinot Noir, which are well recognised and give fine wines. Wherever their growing is economically justified, they become part of the proposed planting structure for high quality wine production, usually in combination with other resistant varieties that guarantee better and more stable yields.

At the same time, regardless of which variety we deal with in terms of planting material production, we recommend our Clients order grafted vines a year before planting. This enables planting according to the precise requirements of selected clone and rootstock combinations, in accordance with the design, a better price and which allows the commissioning of production to a nursery which guarantees the best products. Such manner of collaboration was implemented f.ex in Srebrna Góra vineyard in Cracow, where two fields totalling 15 ha in size were planted with seedlings grafted by ANTES Weinbau-Service GmbH nursery as commissioned by us. After years of collaboration, we chose this company to be the leading partner for our most important designs due to their reliability and the quality of offered products.



Planting material

a



## 3. Posts installation and machine planting

Machine planting is recommended for the realization of designs of 1 ha and above. We own a planting machine manufactured by Wagner Pflanzen Technik GmbH, which is a leader in the manufacture of grapevine planting machines on the European market. Owing to a reliable team which has already assisted in the planting of about 20 large vineyards, the process runs quickly and smoothly. Depending on the configuration of the terrain, the number and complexity of parcels, the length of rows, etc., efficiency may reach up to 10,000 seedlings per day (i.e. up to 2.5 ha). Advanced preparation of the site is essential in order to use such a machine which is the only solution currently applied in larger vineyards all over Europe. There are several alternative methods of vine planting but none of them seem to be as popular as machine planting, mainly due to its efficiency and reliable results in terms of plant growth thanks to strong adhesion of the roots to the soil. The planting of hundreds of millions of vines is assisted by Wagner machines every year.

We would like you to experience that wonderful moment with us when, in one or two days, your site becomes filled with a number of green, wax-covered plants which will please the eyes and heart of every vine-grower. From this point, only 18 months seperate you and your very own, first wine straight from the tank!



Stara Winna Góra, a Vineyard of Krojcig family, April 2009.



A short break while planting Srebrna Góra Vineyard, April 30, 2010.





- 4. Bamboo stake delivery
- 5. Posts supply
- 6. Posts installation

The installation of posts in the year of planting is recommended which, at the same time, allows the use of cheaper supports such as bamboo stakes. The only exception to this principle is the use of more stable supports (which are therefore more expensive), which may support growing vines in the first year and maintain their vertical position. In most cases, however, such supports do not guarantee sufficient stability, therefore post installation is required in the first year, which enables further efficient mechanical cultivation.

The VITICULTURA post system installation, the first Polish solution in that field, is highly recommended. The system's design is the outcome of our extensive experience gathered during the many years of vine-growing. Such posts have already been applied in several Polish vineyards and are gaining popularity on the German, Danish, Swedish and Romanian markets. With the revolutionary new Magnelis coating, we are able to offer our Clients posts that are 10 times more durable than those commonly installed with zinc coating. This means not only durability in line with the life cycle of a vineyard (or even much longer), but also a more aesthetic appearance for dozens of years.

A specialised team with suitable equipment may install the posts but we, however, provide a comprehensive installation performed entirely by our team or a cheaper, simplified version to be mounted with efficient participation of all workers of a vineyard. We will be pleased to assist you with some guidance on how to independently install posts.





## 7. Assistance in purchasing equipment and facilities essential for vineyards.

Our specialists are willing to advise you on the purchase of equipment essential to run a vineyard, including secondhand products. For Viti Cultura clients this service is free of charge.





# 3. The stage of running a vineyard

- 1. Running a vineyard in the first year
- 2. Running a vineyard in the second year

#### 3. Running a vineyard in the subsequent years

For larger plantations or within the period of gaining experience by new vine-growers, our specialists may, partially or fully, manage the vineyards and perform any required works. We willingly share our expertise and experience with our Clients and their employees. Our services entail the furnishing of information regarding the independent performance of certain works as well as on-site staff training.

#### 4. Consultancy on running a vineyard in individual years

Consultation services on running a vineyard in individual years as well as at every stage of its life cycle is provided by our company. For Viti Cultura clients this service is free of charge.

#### 5. Consultancy on vineyard protection

#### 6. Consultancy on fertilization

We offer consultation services on vineyard protection and fertilization, which include:

- the diagnosis of vine diseases and pests
- the establishing of annual programs for vine protection
- formulating protection programs with the application of biological methods,
- analysis of meteorological data (so-called disease models) to precisely determine the dates for chemical treatments,
- the determination of fertilization needs and fertilization arrangement on the basis of the analyses of soil and plant material.



Fungi of the genus Alternaria, yeast-like fungi on medium. Photo by. Janusz Mazurek, Ph.D., 2012.



## 7. Consultancy on weather forecasts

Our offer includes the performance of specialised climatological studies and meteorological forecasts for individual regions or plantations as well as consultations and training on independent weather forecasting (in cooperation with MeteoPlus). Personalised forecasts for a specific location or locations are performed according to the specified criteria arising from our Clients' requests. Such forecasts include: warning forecasts (e.g. before the temperature drops below a predefined figure), the occurrence of hail or wind of a destructive strength as well as forecasts to determine the optimal time for cultivation or harvesting.

The accuracy of forecasts and the range of observations can be enhanced by installing sensors or meteorological stations on site. We provide assistance and advice on the selection and installation of appropriate equipment as well as the construction of models suitable for grapevine plantations. Furthermore, we can prepare reports and maps with the application of the data from measuring points installed on a site and assist in designing a website furnishing relevant information (depending on the equipment purchased).

# 4. Vinery design and realization stage

## 1. Vinery design

#### 2. Winery equipment supply

The stage of planning and equipping the cellar is another vital step of design realization. A winery equipment plan is devised by certified enologist Agnieszka Wyrobek Rousseau and is tailored to an individual vineyard. The design focuses on the quality of produced wines with regards to maximising the time efficiency. It is drawn up on the basis of selected offers of producers from all over Europe (including some of the leading manufacturers from the wine industry to choose from). Our objective is to maintain the best value for money with regards to the most professional and easy to use equipment.



Examples of vinery equipment, Srebrna Góra Vineyard, 2012.



# 5. Wine production stage

- 1. Comprehensive supervision of wine production
- 2. Ongoing advising and on-site enological consultations

Depending on the requirements and capabilities of individual winemakers, we offer various forms of cooperation, including a comprehensive supervision of wine production and/ or an enologist's visit on site. For new investments we recommend comprehensive services leading to the production and bottling of wine by a certified enologist for at least the first 2-3 seasons to stabilize the quality of wine production and to obtain reproducible wines that will satisfy the expectations of our Clients. At the same time we endeavour to ensure that the vineyard staff will benefit as much as possible from the cooperation and will be capable of making independent decisions regarding wine production. Winemaking infrastructure and adequate laboratory equipment to reduce the cost of carrying out external analyses are also included in the service we provide.

Standard services that we perform in wineries include:

- the monitoring of grape ripening and the determining of the best harvesting time subject to the type of wine on the basis of analytical data and the sensory method (quality of tannins and aromas)
- selecting technology depending on the desired type of wine (optimal choice of yeast, supplementary aids, must adjustments, optimum temperature, oxidative or reductive conditions, conducting and monitoring of malolactic fermentation etc.)
- analytical wine studies,
- selecting barrels or other forms of wood,
- monitoring the wine maturation,
- stabilizing,
- selecting corks and bottles,
- controlling stability after bottling.
- 3. Consultancy and enological assistance

Consultancy and assistance with regards to enological services is provided remotely. For Viti Cultura Clients the service is free of charge.

#### 4. Vineyard registration and wine production legalisation

We assist our Clients in fulfilling the requirements inherent in vineyard and wine production application and registration processes. When the service is based merely on the furnishing of information we provide it gratuitously to our Clients. The only cost may apply to the formal representation of Clients before offices (such as Agricultural Market Agency, State Plant Health And Seed Inspection, Agricultural and Food Quality Inspection, Customs Office).

#### 5. Wine sale

Merchandising and current wine sale policy consultation services on both Polish and foreign markets is also part of our offer. We observe current trends of wine consumption and analyse changes in consumer preferences which will help our Clients to adapt their offer to changing market demands. We work closely with companies dealing with wine wholesale, whose customer base comprises well-known chains of retail shops with alcoholic beverages as well as prestigious hotels and restaurants, which should facilitate an immediate recognition of your products among a greater number of consumers.



# 6. Other services

#### 1. Identification of varieties

## 2. In situ identification of varieties

Out of sheer passion and in order to take a break from the vine growing business issues, we, in our spare time research old grapevines grown in Poland which are often as old as 80-100 years. Such grapevines are usually found in sites located in Lubuskie or Zachodniopomorskie Province which constitutes the undisputed evidence that winters are really mild in those regions. In 2007-2011 we co-organised ampelographic expeditions which resulted in the finding and identifying of the first rare variety called Tauberschwarz that is surprisingly common in the vicinity of Zielona Góra and may be found in a number of independent sites. At the same time a dozen other clones of older varieties have been taken, examined and identified (including Riesling, St Laurent, Elbling, Traminer, Chasellas, Burgunder and others), which, as we hope, after having been tested on viruses and further selection, will be grown again in their rightful locations that are the mild slopes of Zielona Góra.

In 2008 we went to Cracow where, by a monastery wall, we managed to find and then, in subsequent years, identify and examine the Feteasca Regala variety that was once grown by the Camaldolese brothers in Bielany.

The identification of varieties is possible in two manners: initial identification of vine varieties on the basis of submitted photographs in high resolution (applicable mostly to classic grapevine varieties) and a precise in situ identification of varieties combined with the ampelographic analysis of the submitted material.

In justified cases, the material may be subject to further testing for the presence of viruses and a selection process until the registration stage of a virus-free clone (or a variety in the case of registration in Poland).

We look forward to working with you, especially if you share similar passions related to the exploration and identification of old Vinifera vines that grow in your region.



In situ Feteasca Regalu, Cracow 2008



### 3. Genetic study of grapevines

### 4. Study of health status of the vine material

A study on the origin of vine variety and the genetic resistance to downy and/or powdery mildew (Rpv1, Rpv3, Ren1, Ren2, Run1, Rpv\_x).

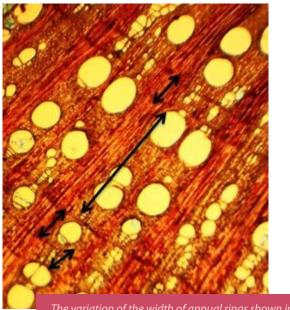
ELISA tests to determine the presence of grapevine viruses (GLFV Grapevine Fanleaf Virus, GLRaV1 GLRaV3 Grapevine Leafroll Virus, ArMV Arabis Mosaic Virus), other viruses -ToBRV, RRV-ch, RRV-g, or other bacterial and phytoplasma diseases (Agrobacterium Vitis) are subject to the availability of the applicable laboratories.

		Nepoviren							The last		
	ToBRV	GFLV	RRV		ArMV	GLRaV	I GLRaV 3 GLRaV		2 GLRaV 6	Fleck	GVA
			-ch	-g							
Elbling	n. u.		n. u.	n. u.				n. u.	n. u.	n. u.	n. u.
Tauberschwarz (Test)	n. u.		n. u.	n. u.				n. u.	n. u.	n. u.	n.u

Exemplary studies to determine basic viruses on the material taken from Poland, both clones free from 4 viruses. During the study about 50% of the samples were infected with at least one virus. The results presented here are lower than those in the natural environment due to the initial visual selection and elimination of material clearly infected with viruses.

# 5. Study of the grape shrubs' condition

We also provide services related to the age determination of grape shrubs (for very old shrubs), dendroclimatological analysis as well as the assessment of damages incurred by shrubs after experiencing frost or ground frost (post-winter bud and cane assessment).



The variation of the width of annual rings shown in the cross section of vine wood.





# 7. Consultancy and training

Our specialists organise and participate in training sessions within the area of their competence. Generally we share our expertise and experience during face-to-face meetings with vine growers and wine makers. Nevertheless, we are open to new forms of contact and cooperation in this respect.

#### Viti Cultura consultants:



#### Agnieszka Wyrobek Rousseau

Agnieszka Wyrobek Rousseau is a highly qualified and experienced winemaker. She graduated from the University of Montpellier in France, where she obtained Diplôme National d'Oenologue. She has many years of experience in vine growing, wine and spirits production, the design of processing plants as well as work organisation that she gained while working in vineyards and wineries all over the world. Her experience is supported by hundreds of medals won in international competitions for wines in the production of which she assisted.

She is the Vice President of Women and Wine of the World IC association, a coorganiser of an annual competition held in Monte Carlo (Monaco) and one of the jurors of Femmes and Spiritueux du Monde Concours International. She is a member UOEF and an author of a number of articles in professional press. She also worked with Magazyn Wino, Czas Wina and is the author of webpages www. kurdesz.com and <u>www.vinaspora.com</u>.

As part of her cooperation with Viti Cultura, Agnieszka Wyrobek Rousseau designs and equips cellars. She also provides enological consultations related to vine growing and the technological process of wine production.



18

#### Wojciech Bosak

A freelance journalist and wine critic who, on a permanent basis, works with wine magazines such as Magazyn Wino, Czas Wina , with the portal Vinisfera and the wine guide Österreichische Beste Weine. He published more than 150 articles on grapevines and wine in journals both Polish and foreign. He regularly sits among jurors during international wine contests and is a member of FIJEV and the Wine Chapter of the Jagiellonian University. The webpage Winologia.pl is his own project.

Wojciech Bosak has been involved in vine growing since 1996 and is one of the founders and the current Vice President of the Polish Institute for Grapevine and Wine. He is an author of numerous publications on viticulture and wine production and he also regularly conducts training sessions for vine growers and winemakers. It was he who designed and assisted in the establishment of dozens of vineyards in various regions in Poland.

For Viti Cultura, Wojciech Bosak deals with terroir assessment and vinery design including the marketing aspects of wine sale. He specialises in enotourism and the organisation of wine-related training courses.



#### Krzysztof Górka



For Krzysztof Górka viticulture is his passion and therefore he wholeheartedly promotes professional vine growing in Poland. He is a co-author of the portal Winnice Polskie, set up in 2005, which was one of the first webpages dedicated to viticulture which promoted the idea of vine-growing in Poland.

Mr. Górka was an initiator and co-organiser of the first International Wine Conference in Poland, held in Mierzęcin in the summer of 2007. He also co-organised the Cool Climate Customers Conference (CCCC 2010) – a vine event in Heppenheim in Germany that gathered over 100 vine-growers from all over the world, including more than 50 from Poland and the neighbouring counties at Viti Cultura's invitation.

Since 2005, he has been designing vineyards, selecting suitable vine varieties, clones and rootstocks as well as supervising the realization and implementation of vineyard designs for the e-sadzonka company.

He is an employee and a sole representative of Forschungsanstalt Geisenheim in Poland overseeing mother plantations in Poland. Mr. Górka is also a co-author of VITICULTURA™ vine posts.

For Viti Cultura Krzysztof Górka deals with financial aspects of vine growing, coordinates projects for individual clients and their subsequent realization.

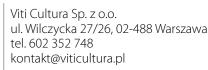


## Damian Małek

Damian Małek is a viticulture specialist with plenty years of experience. His career in vine growing started in 1996 in Germany where, for the first 3 years, he worked on the 15 ha Simon Bürkle vineyard.

In 1999 he started working for ANTES Weinbau & Rebenveredlung. Under the supervision of certified engineers in the vine-growing industry he had the opportunity to acquire knowledge regarding the process of seedling production and learn how to run a productive vineyard. He specializes in vine growing on steep, un-terraced slopes.

Mr. Małek cooperates with e-sadzonka.pl, where, as part of his responsibilities, he deals with machine and manual planting and supervises young plantations. Damian Małek is a co-author of the VITICULTURA<sup>™</sup> vine posts. For Viti Cultura Damian Małek is responsible for machine planting, post installation, consultations on vineyard equipment and various works related to vine growing. In the winter-spring season he oversees the process of seedling grafting for our Clients.







#### Monika Białobrzeska

Monika Białobrzeska is a graduate from the University of Wrocław and a holder of a Master's degree in geography (with a speciality in: physical geography - meteorology and climatology).

A student of Doctorate studies at the same university in the field of meteorology and climatology. Monika Białobrzeska obtained a scholarship and participated in a number of training courses and workshops with regards to viticulture, agrometeorology and geographical information systems (GIS, spatial analyses) as well as dendrochronology and dendroclimatology. She is a member of GiESCO (Group of International Experts of Vitivinicultural Systems for CoOperation) and an author of scientific dissertations and conference presentations and posters.



# Janusz Mazurek

The holder of a Ph.D. in agriculture with a speciality in plant protection, Mr Mazurek runs his own business providing consultation services on plant protection in horticulture – in particular plants that grow in the ground. Currently he mainly advises farms with total sizes of about 1000ha and cooperates with agricultural producer groups.

Janusz Mazurek deals mostly with the protection and fertilization of vegetables (carrots, onions, leaks and celery), orchards, berry plantations and grapevines (ADORIA Vineyard). He provides agricultural protection for Carota Sp. z o.o. and consultation services for the horticultural group Malsad Sp. z o.o., for which he also runs meteorological station iMetos warning of apple scab. To a lesser extent, he advises with respect to ornamental plants in nurseries and greenhouses. Mr Mazurek is the author of a number of publications on plant protection. On a regular basis, he conducts training courses for horticulture producers and corporations recognised in and outside of Poland specialising in plant production, protection and fertilisation (including Bayer, Scotts, Koppert).

For many years he has been working closely with the Department of Plant Pathology and Mycology of the University of Environmental and Life Sciences in Wroclaw. The protection of trees and bushes in urban environments has become his "professional hobby".



Kompleksowe realizacje winnic - od projektu do wina