Interactive ampelography – science and pedagogic

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Ampelography is an applied part of biological science –botanic **(**viticulturists around the world celebrate 350-years of it this year). Ampelography is divided into two divisions:

- general: tasks are studying the systematization of *Vitaceae (Lindley) Juss.*, studying the problems of origin, heredity and distribution of its components, establishing patterns of variability of characteristics and properties of genera, subgenus, species, subspecies, eco-geographical groups and subgroups, populations, varieties, clones and forms of grape under the influence biotic, abiotic and anthropogenic environmental factors; working out methodologies and ways of ampelographical researches;

- particular: tasks are botanic description of genotypes – varieties, clones and forms of grape, their ampelographical, phenological, agrobiological, uvological, biochemical, technological and economical characteristics (http://www.vitis.ru/pubs.asp?r=1&s=dpub&d=desc).

Scientists mark out the third division of ampelography – **ampelometric** including special measurement of quantitative characteristics, studied parts of vitis and/or it's varietal characteristics and determine their degree of variation on the basis of biometric methods (http://kubsau.ru/adm279in/kaf_pubs/index.php?mess=1). Creation of digital laboratory SIAMS Photolab (http://siams.com/solutions/) makes possible to eliminate difficulties with collecting, reading and analysis of ampelographical information. So during the identification of needed genotype it is scanned leaves, images are moved to the PC, then their linear and angular parameters are measured automatically (square and parameters of the leaf, the length of graft, the length and width of leaf blade, angles alpha, beta, gamma and another features), are written to a spreadsheet (for example, Microsoft Excel or Openoffice Calc), processed by biometrical methods of analysis and compared with standard and syntype data.

Interactive ampelography (english. interactive — interacting with each other), new perspective direction in ampelometry, offered by the author, where due to systemic effect arising in Internet-system because of nonlocal expert interaction equipped with necessary tools, and users having information about phenotypical and genotypical characteristics of grape samples, identification of these samples and finding out of their names. It is proposed to create an international experts, researches and interactive ampelography users Internet-community. For this purpose this symposium should be coincided as founder and the participants are active workers. At the initial stage of development of community it is expected off-line contact between their participants through different Internet-services (e-mail, ICQ, Skype, web-forum or social net and other). In future it is planned to create an intelligent ampelographical portal with databases and knowledge sharing, based on them an international automatic on-line consulting ampelographical service, created, supported and developed by experts, developers and researches of international ampelography Internet-community. It is expected that information received from experts and users will be processed in real-time. The degree of its formalization and willingness to use will grow to the knowledge level, previously unknown to science. As a result, interactive system will benefit as in development of ampelography so in using of practices, increase an efficiency and validity of their decisions.

In pedagogic: possibility of using the resources of the international Internet-community of experts, researchers and users of interactive ampelography in study process will create a qualitatively new conditions for learning students, bachelors and graduates, preparing of new highly skilled staff of researches, theorists and practitioners in ampelography.