



GERMPLASM REPOSITORY FOR GRAPEVINE

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The grapevine herbarium as an aid to grapevine identification — First results

Worldwide, plant material is maintained in herbariums as a source for botanical description, as well as for ascertainment of a plant's identity. Grapevine specimens are to be found in many herbariums throughout the world. Since 1988 a grapevine herbarium is going to be established at the Institute for Grapevine Breeding, Geilweilerhof. Dried leaves and shoot tips, seeds and pollen are maintained.

Due to the international ampelography project (see Newsletter 2, Vitis 30, 45—47, 1991), cultivars of worldwide occurrence were added. We received leaf and seed samples from numerous grapevine collections:

Horticultural Research Institute, Vineland Station, Canada; E.N.S.A., Chaire de Viticulture, Montpellier, France; Forschungsanstalt für Weinbau, Gartenbau, Geisenheim, Germany; Staatliches Weinbauinstitut, Freiburg, Germany; Staatliche Lehr- und Versuchsanstalt, Lauffen/Neckar, Germany; Landes-Lehr- und Forschungsanstalt für Landwirtschaft, Wein- und Gartenbau, Neustadt, Germany; Landes-Lehr- und Versuchsanstalt für Landwirtschaft, Weinbau und Gartenbau, Trier, Germany; Landesanstalt für Rebenzüchtung, Alzey, Germany; Bayerische Landesanstalt für Wein- und Gartenbau, Würzburg, Germany; Georgian Agricultural Institute, Digomi, Tbilisi, Georgia; Institut de la Vigne, Lycovrissi, Athens, Greece; University of Horticulture and Food Industry, Research Institute of Viticulture and Enology, Kecskest, Hungary; University of Horticulture and Food Industry, South Transdanubian Research Institute of Viticulture and Enology, Pecs, Hungary; Istituto di Coltivazioni Arboree dell'Università, Torino, Italy; Università degli Studi, Istituto di Coltivazioni Arboree, Palermo, Italy; Ruakura Agricultural Centre, Hamilton, New Zealand; Estacao Agronomica Nacional, Oeiras, Portugal; Oenological and Viticultural Research Institute, Stellenbosch, Republic of South Africa; Departamento de Viticultura y Enologia, I.N.I.A., Jerez de la Frontera, Spain; University of Minnesota, Minnesota Landscape Arboretum, Minnesota, U.S.A.; Faculté des Sciences Agronomiques, Institut d'Horticulture Ro Radmilovac, Belgrade-Zemun, Yugoslavia; Faculté des Sciences Agronomiques, Institut de Viticulture et d'Arboriculture, Novi Sad, Yugoslavia.

In the meantime we received leaf specimens from more than 900 different cultivars. For 350 cultivars we keep more than one accession. Seed samples exist from about 600 different cultivars.

The grapevine material of the herbarium is maintained for description, identification and differentiation purposes. In order to record the true and typical appearance of a cultivar, the following preconditions have to be fulfilled:

1. Conformity of plant material and cultivars designation,
2. Leaf specimen in incontestable condition.

Concerning the first precondition, leaf comparison of cultivars of the same name but from different sites revealed that 85 % of the 350 different cultivars were correctly named. For 5 % of the cultivars identity was not evident, and 10 % of the cultivars seemed to be misnamed. Would it be realistic to project this figure on the world wide grapevine collections and to conclude that about 10 % of the cultivars maintained are misnamers?

Regarding the second precondition, almost 4 % of the leaf samples showed virus symptoms, more than 4 % of the leaf samples were in unsatisfactory conditions and about 20 % of the leaves received were defective and not suited for evaluation.

3rd International Ampelography Course

It may be mentioned that from July 14 to 17, 1992 the 3rd International Ampelography Course will take place at the Institute for Grapevine Breeding Geilweilerhof, under auspices of the O.I.V.

The object of the course is to train the description and identification of grapevines. The program comprises methodical instruction, practice and virus sanitation.

Tabular listing of descriptor data

A first compilation of the data obtained by the application of the 'Preliminary Minimal List of Grapevine Varieties' is in work and will be sent to the participants of the ampelography project as soon as it is finished.

New species

Vitis bloodworthiana (COMEAX) and *Vitis jaegeriana* (COMEAX)

Two new *Vitis* species, *V. bloodworthiana* (COMEAX) and *V. jaegeriana* (COMEAX), were described by BARRY L. COMEAX¹). They occur at high elevations (between 1800 and 2400 m) in Central and Western Mexico. Both species seem morphologically close to the occidental North American species, *V. arizonica* (ENGELM.) and *V. treleasei* (MUNSON). They flower during mid-season, have small fruit (0.6—1.1 cm), black and thin berry skin.

V. bloodworthiana was found in the Sierra Madre Occidental, in the states of Durango and Sinaloa, *V. jaegeriana* in the Sierra Madre Oriental of San Luis Potosí. At both sites annual precipitation is 400–800 mm and minimum temperature ranges from –10 to 0 °C. *V. bloodworthiana* occurs in dry or relatively moist but well-drained sites. *V. jaegeriana* occupies relatively drier sites.

¹⁾ Address: Galveston College, 4015 Avenue Q, Galveston, TX 77500, U.S.A.

New cultivars

Mother Gloyd:

White berried, seedless.

Parentage: (*V. candicans* × Perlette) × Centennial Seedless.

Breeder: C.O. Foerster²⁾

Dr. H. P. OLMO, University of California at Davis, described it in a personal communication to the breeder: 'The size of the berries is larger than Thompson Seedless and similar in shape, not as elongated as Centennial Seedless'. The firm meaty berry texture is of *vinifera* type, flavor is mild, raisins are of 'noticeable muscat flavor'. Seed rudiments 'appear even smaller than Thompson Seedless'.

²⁾ Address: C.O. FOERSTER, Jr., P.O. Box 5, Elsa, TX 78543, U.S.A.

Viktor:

White-berried, full ripened, slightly rose.

Parentage: Zalagyöngye × Kazacska.

Breeder: J. CSIZMAZIA³⁾, J. A. KOSZTRIKIN

Viktor is the result of a common breeding program between the Research Institute for Viticulture and Enology at Eger, Hungary, and the Research Institute of Viticulture and Enology, Novotscherkassk, Russia.

One of the breeders, Dr. J. CSIZMAZIA, sent the description of the new hybrid: Viktor ripens together with Müller-Thurgau. Wine quality is the same as of *V. vinifera* cultivars. The unsprayed plantings did not show disease symptoms. Frost resistance is considered as high, because lignification of shoots starts already during veraison and finishes early.

³⁾ Address: 1124 Budapest, Lejtő-UT.7., Hungary

Recently published

ALLEWELDT, G.; DETTWEILER-MÜNCH, E.: The Genetic Resources of *Vitis*, Part I and II, 3rd ed., 1992. Bundesanstalt für Züchtungsforschung im Wein- und Gartenbau, Institut für Rebenzüchtung Geilweilerhof, Siebeldingen.

This compilation is the updated result of the worldwide inventory of grapevine species and cultivars, listing prime names, synonyms, berry color, origin, parentage

and belonging to *Vitis* species. The inventory is available in printed version and on disks.

DETTWEILER-MUNCH, E.: Gene resources of grapevines (literature review 1969-1991). Dokumentation der Weinbauforschung, Bundesanstalt für Züchtungsforschung im Wein- und Gartenbau, Institut für Rebenzüchtung Geilweilerhof, Siebeldingen 1991.

This compilation comprises abstracts of papers on wild grapevine species, ampelographic description, evaluation of grapevine cultivars and germplasm preservation.

GALZY, R. *et al.*: *In vitro* Collection of Grapevine Varieties, September 1991. INRA, Chaire de Microbiologie Industrielle et de Génétique de Microorganismes, Place Viala, 34060 Montpellier Cedex 1, France.

This is a listing of the grapevine varieties maintained *in vitro* at the above mentioned Institute. The collection comprises 4 Vitaceae, 16 *Vitis* species, 11 rootstocks, 7 direct producers and 57 grapevine cultivars. For each cultivar, origin, treatment applied for virus sanitation and storage condition are specified.

HARST-LANGENBUCHER, M.: *In vitro* Collection of Grapevine Varieties, January 1992. Bundesanstalt für Züchtungsforschung im Wein- und Gartenbau, Institut für Rebenzüchtung Geilweilerhof, Siebeldingen.

This summarization represents the present status of grapevine varieties maintained under normal and reduced *in vitro* conditions at the above mentioned institute. The collection comprises 17 *Vitis* species, 14 rootstocks, 58 cultivars and 55 clones of 11 varieties. From each genotype, origin, year of transfer to *in vitro* conditions, conservation method, *in vitro* growth behaviour and storage capacity are outlined.

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