February 2017

Promising new cherries

J. L. Budd
Iowa Agricultural College

Follow this and additional works at: http://lib.dr.iastate.edu/bulletin

Part of the Agriculture Commons, Fruit Science Commons, and the Horticulture Commons

Recommended Citation
Available at: http://lib.dr.iastate.edu/bulletin/vol1/iss2/7

This Article is brought to you for free and open access by the Extension and Experiment Station Publications at Iowa State University Digital Repository. It has been accepted for inclusion in Bulletin by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Promising New Cherries.

Prof. J. L. Budd.

In the summer of 1882 the writer had a fine opportunity for studying the character of tree and fruit of the European cherries from the valley of the Moselle in East France, eastward to the Volga in Russia.

In the spring of 1883 we imported one year old trees of the varieties which we decided to be most promising for trial on the prairies of the Northwest.

These trees were set in orchards and have had hard usage, as they have been exposed to the recent test summers and winters, that have killed out the trees young and old of the grade of hardiness of the Early Richmond and English Morello, and in addition they have been cut mercilessly for scions in autumn and buds in summer.

A better opportunity for determining the relative hardiness of trees and perfection of foliage has not been given in the history of prairie settlement.

With this severe trial we are now pleased to report that many of the varieties have endured the tests as perfectly as our native plums such as De Soto and Wolf, and have proven quite as hardy in fruit buds.

During the season of blossoming the past spring we had severe frosts, yet twenty or more sorts fruited, some of them very heavily.

We are also pleased to report that the fruit so far has come up to our European estimate in quality and color, but not in size on account of the strong growth of new wood induced by heavy scion cutting in autumn.

VARIETIES FOR CENTRAL AND NORTH IOWA.

Spate Amarelle. Much grown for dessert and culinary use in East Poland and North Silesia, where it is noted for its regular and bountiful crops. Tree smaller than English Morello with pendulous habit.

Our trees from five to six feet in height were bending with the weight of the fruit this season.

Fruit medium to large, color dark purple when ripe. Flesh and juice colored.

When first colored red the fruit has a bitter taste. At this stage of growth it is excellent for canning, and when fully mature it is desirable for dessert use. Season about the 20th of July.
Schattan Amarelle. The word "schatten" is said to mean shadow. Hence we shall send it out as Shadow Amarelle. The name comes from the mirror like reflection from the shining skin. Much like the above variety in size, shape, quality and season of fruit. Trees were laden this "off" cherry year.

Gros Lang Loth. We have sent this out as "Large long late." A small growing variety coming into bearing in the nursery. It is known in Poland and Silesia as "Double Shadow Amarelle" but is not identical with Brusseler Braune as stated by Leroy.

Fruit, large, roundish, truncate at stem end, nearly black when ripe. Juice colored. Pleasant sub-acid flavor when ripe. Season of English Morello.

Kings Amarelle. Tree larger than the above and less pendent in habit. Fruit round, truncate at both ends. Flesh white, soft, juicy, but when fully ripe the juice is slightly red. Pit very small. Ripens with Early Richmond.

Amarelle Boquet. A small growing tree with fruit, much like Richmond in season and quality but with more grape sugar.

Cerise De Ostheim. Tree some larger than the above with pendulous shoots even when young. It fruits early and is hardier in tree than what is known as Minnesota Ostheim, and bears larger, better, and earlier fruit. Pit small, flesh and juice red, tender, juicy, and when ripe pleasantly sub-acid.

Orel. We have given this name to a dwarf variety, from Orel Russia. It belongs to the Vladimir race, with small leaves and close habit. It comes in to bearing when from three to four feet in height. Fruit larger than Montmorency, nearly black when ripe and very mildly sub-acid in flavor. Promises to be very valuable for the North.

Shubhman (6m.) Another variety of the Vladimir family with small leaves and close habit. Fruit smaller and later than the above, black, and excellent in quality.

23 Orel. As yet we are not certain as to the proper name. A neat round topped tree with firm thick leaves. It comes into bearing early and seems very hardy in fruit bud.

Fruit much like Richmond in color, season, and quality.

Doppelte Natte. Tree of larger size than the above with more upright habit. It has not held its leaves this season better than Montmorency but it is ordinarily good in foliage. It has stood the recent winter perfectly. The fruit this year was perfect and agrees with Dr. Hogg's description. Fruit large for its class; skin dark brown or brownish black. Flesh very red and juicy, and when fully ripe of rich aromatic flavor. This late year it ripened July 20th.
Griotte Imperial. A small tree and an early bearer. Foliage better than Richmond but this year not perfect. Fruit, large, dark red, inclined to conical, flesh and juice red. Flavor pure and free from bitter even when immature. Mildly sub-acid when ripe.

Brusseler Braune. A variety much prized on the sandy plains of East Poland. A larger grower than Richmond, with good foliage. Fruit large, nearly round, purplish red in color, juice slightly red, flavor pure and quite acid. As it contains much grape sugar it is valuable for canning and drying. Later I think than English Morello.

Lutovka. A fine round topped grower with strong shoots and good foliage. Much grown in Poland, North Silesia, and South Russia, for making "Kirschwasser." Fruit large, yellowish red when ripe, flavor pure and sprightly; season late. Will be valuable for dessert and culinary use.

Bessarabian (No. 62). Our favorable report of this variety of 1885 we are glad to repeat. It will endure more abuse of tree than most of our Forest trees. Our original tree has been cut for buds and scions for five years taking off all the new growth. Yet the tree is sound to-day. Fruit large, dark red, firm fleshed, and when ripe very mildly sub-acid. It promises to make a long lived tree of considerable size, and to prove a regular bearer of choice fruit.

Sklanka. A handsome round topped tree with pendent branches and best of foliage. Our trees standing on rich black soil, where the Richmond utterly failed even prior to our recent test winters, are as perfect as Box Elders.

Fruit large, skin yellow and red. Flesh yellow, firm, very mildly and refreshingly sub-acid. Pit very small, season of the Montmorency.

Frauendorfer Weichsel. A strong growing tree with weeping shoots. Tree very hardy and foliage good. It is described by the leading horticultural writers of West Europe, and it seems strange that it was not previously introduced. Much grown in Poland and North Silesia. Fruit large, dark red, truncate. Flesh tender, juicy, sub-acid, and good for any use.

Strauss Weichsel. Another fine tree with good leaves. Fruit large and nearly black when ripe. Flesh juicy, refreshing, and nearly sweet. Season a few days later than Richmond, very promising.

Lithaur Weichsel. Much grown in Livonia, in Southwest Russia, for drying and cherry wine. A good hardy, strong growing tree. Fruit smaller than Richmond, but with smaller pit, and thicker flesh. Skin nearly black, flesh quite acid, colored dark red, and with much grape sugar. Most valuable for culinary use.
Griotte Du Nord. As introduced from North Silesia this is not identical with "Ronalds Large Morello" as stated by Downing. A good tree with very good foliage. Fruit large, nearly black, flesh firm. Matures about the 20th of July. In East Europe it is grown on north walls for very late use.

Juniat Amarelle. A neat round topped tree of the Griotte type. Fruit much like Richmond in size, color, and season, but firmer in flesh, and better in quality.

24 Orel. The name is not yet known on account of loss of invoice when the one year old trees were imported. A fine grower with large thick leaves, strong buds, and large shoots. Fruit about the size of the English Morello, dark red, firm, colored flesh, mildly acid, season of the late Richmond.

27 Orel. Another strong growing hardy sort of great promise. The few first specimens indicate a late season, but they were taken before they were ripe enough for testing.

26 Orel. This is the "L'anzkaja Black" of East Europe which we will send out in the future as "Orel Sweet." It appears to be hardy in tree and fruit bud, but may not do well as far north as some of the preceding. The single original tree has been sadly abused by continued scion cutting, in summer for buds, and in autumn for grafting, yet it is in good condition with perfect foliage. Fruit medium in size, black, with very small pit. Flesh dark colored, and decidedly sweet. Very promising as the hardiest sweet cherry in our collection.

25 Orel. This was spoken of in the Bulletin of 1885 as one of the Vladimir varieties. But it proves to be a Griotte much like 23 Orel, but some later in fruit and larger in size of tree.

Heart Shaped Weichsel. This is given in Eastern European Catalogues as "Herzformige Weichsel." It is an evident cross between the Sweet cherries of the East and the Dukes. It is admitted as a lawn tree in East Europe on account of its symmetrical habit of growth and handsome striped leaves. The first impression is that the tree is not in perfect health on account of its remarkable foliage.

Fruit large, heart shaped, purplish black in color, and nearly sweet. Highly prized for dessert use in East Russia where most of the Sweet cherries do well. It may not succeed well north of the 42d parallel.

George Glass. Under this name we have a cherry from Marshal county, Iowa, where it was introduced from Northeast Germany. In leaf and habit of growth it much resembles Bessarabian. Its fruit also shows a near relationship to that variety. Very promising.
PROMISING VARIETIES FOR SOUTH IOWA.

The following varieties are hardier with us than Early Richmond, and the foliage is quite as perfect as any of the above noted sorts. But on our trying grounds they have shown in the stem some slight indications of winter injury, and cannot be recommended for trial north of the 41st parallel. The descriptions of fruit are from our European notes, mainly.

**Abbesse De Oignies.** Of the Red Duke family grown in East Russia on favorable soils in North Silesia, and Southeast Russia. In no case have we known the leaves injured by rust or mildew. Even the present unfavorable seasons the foliage of our budded trees is perfect. Fruit large, round, dark red. When ripe mildly sub-acid.

**Red Oranien.** This is given by Hogg and Leroy as a synonym of Carnation. But as we have it from North Silesia it is of the Red Duke family, and very unlike the Carnation in leaf, habit of growth or fruit. As it endures the spring frosts in North Silesia, and East Poland it is promising for trial in South Iowa. Fruit in season and quality much like the preceding.

**Amarelle Bunt.** Another variety of the Red Dukes much prized in North Silesia for dessert use and cooking. A fine grower in orchard and nursery, and far hardier in tree on our grounds than Richmond or English Morello; mainly I think on account of its more perfect foliage. The fruit is highly prized in the markets of Warsaw, Poland.

**Duchess De Angouleme.** Of Red Duke family. Foliage perfect and a fine grower. A heart shaped fruit of large size and excellent quality.

**Gros Gobet.** This has been classed with the Montmorency's, and even with the Kentish, but it is plainly crossed with the East Europe Dukes. Fruit large, red. Flesh white, quite acid, and best for canning. Ripens about the 20th of July with us.

**Red Muscateller.** A cross with the Red Dukes, with neat habit and good foliage. Common in North Silesia on dry soil. Fruit large and said to be of good quality for dessert and other uses.

**Double Glass.** First seen in North Silesia. A fine grower with perfect leaf. A large fruited variety of the Red Dukes likely to prove valuable south of Des Moines.

**Vilne Sweet.** A variety sent us from Vilne in Southwest Russia. As tested at Vilne the fruit was large, early and sweet. A good round topped grower with best foliage. We regard it very promising for trial in South Iowa.

GENERAL NOTES.

**Deep Setting.** It is generally conceded that dry ridge soil with porous sub-soil is best for the cherry. On such soil the trees set in orchard should
be put down from four to six inches deeper than they stood in the nursery. Eastern trees are always budded on tender roots and we are compelled to root graft on the Mazzard roots, or bud on the Mahaleb.

By setting deep, roots will be thrown out from the scion, or above the bud, in two or three years. Indeed the Russian and East German sorts often throw out roots from the scion the first year after setting the root grafts in nursery. When rooted from the scion in the nursery the seedling root can be cut away, and the tree put in the orchard on its own roots, permitting rapid multiplication by sprouts and root cuttings.

**Heading Low.** Even in West Europe low cordon and bush training of the cherry is becoming common in many parts. In East Europe, in sections remote from large bodies of water, all stone fruit trees are headed low. In the Volga region the cherry is grown in bush form, with several stems like the currant or Gooseberry.

Experience has also favored the very low stems, or even bush form in all the prairie States. Often the stems are fatally injured when the twigs show no discoloration. Fortunately many of the East Europe varieties favor the shading of stems by their pendent habit of growth. But even with these it is best to have low stems, the lower the better.

**YOUNG TREES IN THE ORCHARD.**

As a rule we find that parties receiving the one year old cherry trees sent out from the college for trial put them in nursery rows with view to setting them in the orchard when they attain the proper size. A little thought will exhibit the fact that it is far better to set them where wanted in orchard.

(1). The little trees have all the fibrous roots, and can be rapidly and safely transplanted.

(2). By raising the bark at several points, on the part of the the little stem above the point of union with the stock, the emission of roots from the scion is favored, and the height of the stem and the form of top can be established with little trouble.

(3). If growing where wanted specimen fruits can be secured on many sorts on trees which our friends think are about the proper size for transplanting.

**NURSERY PROPAGATION.**

As we are compelled to use tender seedlings for cherry propagation we are anxious to impress the fact that root grafting the cherry is far better for the planter than propagation by budding. The roots grafts are set down to the top bud of the scion, thus placing the tender root considerably below the surface, and favoring the emission of roots from the scion. When set still
deeper in the orchard such trees are not liable to root killing. As root grafting the cherry does not seem to be generally practiced the mode of procedure that has given us an almost perfect stand with forty varieties, all on Mazzard root, this season, may be useful.

(1) The scions were cut before severe cold weather last fall and packed in dry forest leaves in a box in the cellar. If packed in sand, earth, or moss, we find they absorb too much water.

(2) The scion is put in the Mazzard seedling at the crown by the mode known as “side grafting,” the main requisite being to make the wedge on the scion only slightly, if at all, thickest on the outside. The usual instruction in regard to making wedge thickest on the outside is overdone. The whole pressure coming on the bark and the Cambium lawyer gives no room for the young cell growth that favors union of stock and graft.

(3) We pack the graft, after tying and waxing in earth, sand or moss, taking care to leave the main part of the scion exposed to the cellar air.

(4) A dirt covered cave is best for storing the grafts and it must be kept cold. The temperature is regulated by opening the cave in the early part of the evening when cold, and keeping it tightly closed during the day. Light freezing does no harm, but if warm enough to start the buds before they go in the nursery they rarely make a profitable stand. Keeping the buds dormant is the main essential to perfect success. With started buds, the change of temperature, and moisture of the earth, when planted out in the early spring, will rot the buds of the scion.

LATE GRAFTING OF THE CHERRY.

All writings upon the subject favor very early grafting of the cherry in the open air, and the use of strictly dormant buds in grafting under cover. These instructions are well founded, but they hinge on the principle that the cell structure of the wood of the stock and scion must be in the same condition. If root and scion be started about equally they will unite quite as well as has been stated by Mr. Henry Avery and others. To illustrate: Last spring, late in April, it became necessary to take up several valuable cherry trees loaded with fruit buds. We cut off all the scions down to the two year old wood, and set them on Mazzard seedling roots in the graft room. The grafts were put in the nursery a few days later and over ninety per cent of them have made strong growth. In this case the buds were started, on one variety, so as to exhibit the points of the embryo leaves, yet the roots taken from the cellar had started fully as much. If the seedling had been kept dormant in the ice house I do not think a single scion would have united with them. This principle applies to all top-working in the open air of apple, pear, cherry, plum, etc. If the work is deferred until the buds on the stocks are
well started, the scions should be about equally advanced. In late spring grafting we have failed almost completely with the scions kept dormant, and have succeeded perfectly with those cut as needed in the open air.

MIXED PLANTING.

Observations in Europe and this country favor the belief that alternating varieties in the cherry or plum orchard favors regular and continued fruitage. A variety that might prove to be a very poor bearer when depending on its own pollen supply, may be found regularly fruitful when intermingled with other sorts. In our climate, if the weather during the blossoming period is hot and windy, a variety may mature and waste its pollen before the stigmas are ready to receive it. In such the pollen of adjoining sorts may perform the needed work with the aid of the insects or the breeze.