

company profile and catalogue
VOINESTI WALNUT NURSERY
Growing the best walnut trees for your orchard



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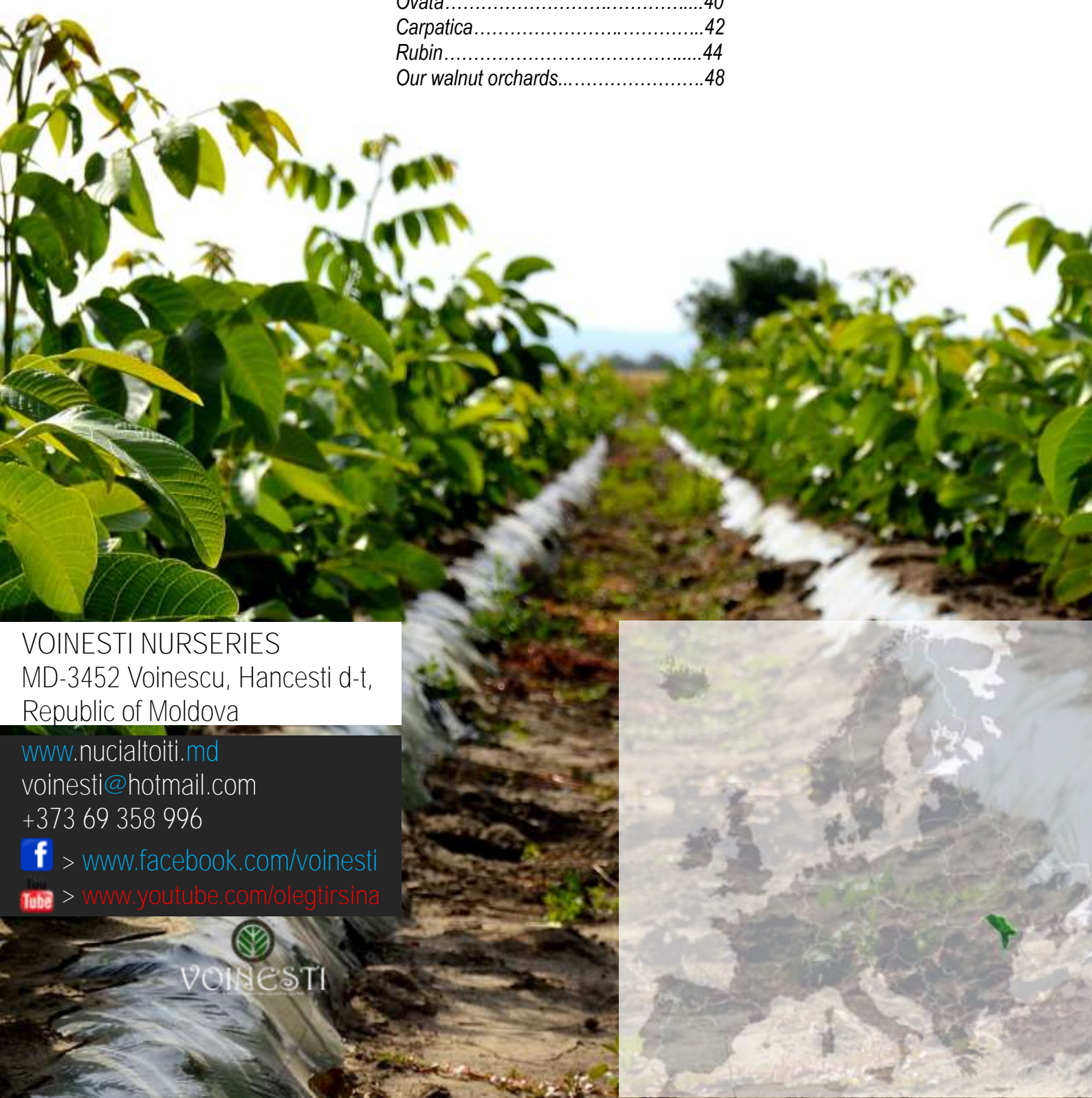
VOINESTI WALNUT NURSERY

Growing the best walnut trees for your orchard



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VOINESTI

WE GROW ROOTS!

AN OUTLOOK OF WHO WE ARE AND WHAT WE DO

Walnuts grow for over 2000 years in Moldova, being one of the first European territories to host this species introduced from Asia by Greek merchants. Being a highly valued tree for both its fruits and wood, over millennia a strong connection and tradition of cultivating walnuts has developed. By the end of the 1990s there was a growing interest in planting commercial orchards so varieties had to be and were therefore developed. In turn, this has led to the necessity of nurseries that would supply the needed grafted walnut trees. These are the grounds on which Voinesti Nurseries were founded.

Moldova has a long tradition in vineyards and orchards. Fruit growing is successful here thanks to the richest of soils, relief and climate conditions. Add to this hardworking people who love the job and put a lot of heart and soul to the work they do. The result is a produce full of taste, aroma and texture. One is delighted to taste fruits coming from Moldova and this is well known across Europe. That refers to walnuts also.

Voinesti Nurseries were established in the 1970s, initially specialized in growing apple and plum trees. To this day we have a medium production of those species. But in 1989 we planted our first walnut graftwood mother orchard, containing all the Moldovan varieties of that period. At the same time, we started grafting and growing walnut trees in our nurseries with a gradual increase in production and a following extension of the varieties list we worked with. In 2012 we began grafting the best of the French and American varieties and a new addition of two other USA varieties was carried out in 2014. From 2015 to 2018 we selected and registered three distinctive and unique varieties: the huge *Carpatica*, the big and eye-catching *Ovata* and the notorious red kernel variety *Rubin*. Our team undertook their registration in the EU plant varieties catalogue and, as a result, today it is legally possible to import and plant them in any member state.

The quality of our trees is the subject that receives most of our focus and technological resources. We are committed to growing and supplying only the material that complies with rigorous quality criteria. We are well known for the exceptionally well-developed rooting system of our trees, a proof of their health and a guarantee to the maximum post-planting tree survival.

Of similar importance to us is the phytosanitary status of our trees. Over the years we developed production protocols and nutrition programs in the nursery enabling us to grow trees free of any disease or infection. Every year, inspectors of the national certification authority collect random samples at various times during the vegetation period and after tree removal from the nursery production fields. These samples are submitted to specialized laboratories in Moldova and EU and tested for relevant bacteria, fungi, nematodes and cherry leaf roll virus. More than 15 years of such tests never revealed the presence of any pest.

In relation to our customers, we try to be as supportive as we can by providing the best trees, organizing the shipping logistics and providing after-sale assistance. We offer 3 years of free consultancy to all our customers, either directly or through our dealers. We endeavor so that every orchard founded with planting material from Voinesti Nurseries would be a success story no matter what! That is a mission to which we are dedicated.



Papiniera Voinesti

WALNUTS AND HAZELNUTS






VOINEȘTI NURSERIES

A COMPANY AND A TEAM OF PEOPLE DEVOTED TO GROWING QUALITY WALNUT TREES

Over the years we have been constantly updating our methods, investing resources, building new facilities, elaborate new technological sheets to help walnut growers. At the same time, we stayed in close contact with the scientific and technological output of foreign specialists and walnut research centers, tested and then implemented most of all the successful achievement done overseas that looked promising.

We grew bigger and so did our planting material production. In turn, this enabled us to supply our trees to walnut growers in other countries. To this day we have official partners or work directly with customers in Romania, Ukraine, Italy, Slovakia, Czechia, Poland, France, Spain, Latvia, Armenia and Russia. And our export geography is expanding every year.

Here is a list of the main walnut varieties we grow:

	CHANDLER ▪ TULARE ▪ SERR ▪ HOWARD ▪ ROBERT LIVERMORE ▪ VINA ▪ SUNLAND
	FERNOR ▪ LARA ▪ FERJEAN ▪ FERNETTE ▪ FRANQUETTE ▪ MEYLANNAISE ▪ RONDE DE MONTIGNAC
	PESCIANSKI ▪ COGĂLNICEANU ▪ CĂLĂRAȘI
	CARPATICA ▪ OVATA ▪ RUBIN

Since 2021, we are also growing two-year old hazelnut trees (self rooted layers and occasionally grafted onto *Corylus colurna* rootstocks).



Our headquarters



We grow our hazelnuts trees in raised beds covered with plastic mulch, the same method as in grafted walnut trees. By the second year we obtain very vigorous, well branched and strongly rooted planting material.

We mainly work with Italian varieties, coupled with Italian specialists for consultancy, they are: *Tonda Romana*, *Tonda Gentile delle Langhe (Trilobata)*, *Tonda di Giffoni*, *Nocchione*, *Camponica*, *Mortarella*, *Teano*, *Tonda Franciscana*.

French varieties: *Fertile de Coutard (Barcelona)*, *Corabel*, *Merveille de Bolwiller*.

American varieties: *Ennis*, *Butler*.

Romanian varieties: *Valcea 22*, *Urișe de Valcea*, *Cozia*, *Romavel*.



Two-year old hazelnut trees with very well formed branching and roots



WALNUT ROOTSTOCK PRODUCTION



Seedling production fields

We grow annually over 400 000 one year old walnut seedlings used for grafting. The seeds are collected in the local walnut tree populations and sown in the green husk by the end of August. We generally **don't irrigate, except in the years with prolonged droughts**. For irrigation we use sprinkler irrigation systems and never make more than two irrigations per season. We keep the production fields free of weeds all the times by mechanical means.

The digging is done generally in the spring prior to the grafting period, or on demand by the end of November or during winter when temperature is above zero.

Half of our rootstock production stays at Voinesti Nurseries to be used for our own grafted tree campaign and the rest being shipped to other local nurseries and abroad. We are supplying with rootstocks some leading nurseries in France, Spain, Romania and other countries. We are open to new partnerships and have the means to expand our production to eventually fit new demand.



One year old walnut seedlings





TABLE GRAFTING. METHOD AND MEANS.





We start the grafting campaign by the end of February. Our grafts are done by the Cadillac method, using specific machines. Then, the grafted seedlings go to the stratification rooms where connecting tissue between roots and scion develop during 2 to 3 weeks.



NURSERY PRODUCTION FIELDS

Of utmost importance in having an excellent growth and development of the grafted trees is the (1) nature of the soil, (2) the preparation of the soil and the growing system and (3) the quality of planting and care taken during and immediately after the planting of the grafts, a decisive element in the whole production chain.





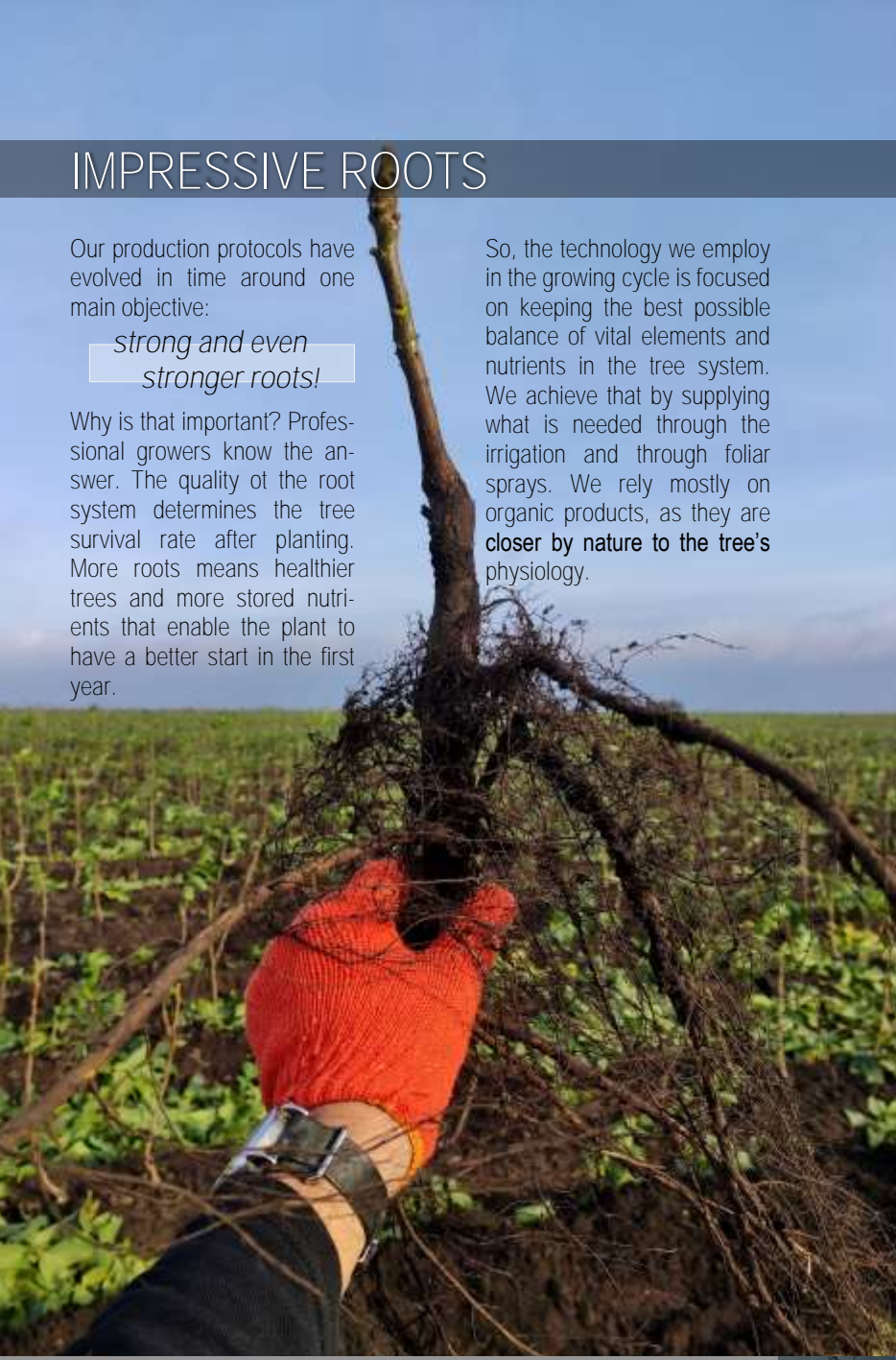
IMPRESSIVE ROOTS

Our production protocols have evolved in time around one main objective:

*strong and even
stronger roots!*

Why is that important? Professional growers know the answer. The quality of the root system determines the tree survival rate after planting. More roots means healthier trees and more stored nutrients that enable the plant to have a better start in the first year.

So, the technology we employ in the growing cycle is focused on keeping the best possible balance of vital elements and nutrients in the tree system. We achieve that by supplying what is needed through the irrigation and through foliar sprays. We rely mostly on organic products, as they are **closer by nature to the tree's physiology.**





We start digging by the end of the vegetation period. We endeavor to do this as late as possible to allow the trees to fully enter their period of rest in order to prevent any stress due to premature uprooting. In some particular cases when early shipping is required, we start preparing the trees ahead of time by removing the leaves in three consecutive steps. The gradual defoliation forces the tree into a progressively arrest of their vegetation and accelerates their hardening off.

The equipment we use for uprooting goes deep underground and allows us to harvest the roots almost entirely. The sandy soils we grow our trees on greatly facilitate this task. After digging, we calibrate the trees into several categories of height and stem caliper. By doing so, we offer our customers the option to choose the planting material that fits best their budget, experience and expectations. Nevertheless, from smallest to tallest, our trees have a great survival rate that we guarantee.

During storage, we keep the roots moist at all times. In some cases, when trees are to travel far and/ or to be planted in poor soils, we immerse the roots in a special solution containing mycorrhizae and organic fertilizer to compensate for some loss of vitality that could potentially arrive.

Our trees are certified by the national certification authority. They carry official labels as well as additional color Tyvek labels to ease visual recognition of different varieties when shipped. We palletize the trees and fully cover them with stretch wrap to prevent moisture loss during transportation.

We provide all needed planting instructions and recommendations, as well as three-year unconditional free assistance and advising.

We are committed to your success!





Packing for export. We take all measures to prevent roots from dehydrating during shipping and also ease unloading and further storage at our customers premises if needed. Pallets are also properly labelled.



Chandler

American varieties

Chandler was bred by the American breeders Serr and Forde by a crossing they carried out in 1963, officially registered the variety in 1978. Nowadays, at world scale this is the preeminent walnut variety, thanks to its high productivity and excellent kernel as well as outstanding ease of kernel extraction, of huge importance to the processor industry.

The first Chandler orchard in Moldova was established in the spring of 2012 in the northern region of the country. This introduction was received with much skepticism as everyone considered it erroneous due to the significantly colder climate Moldova has compared to California's and thus the presumed risk of inadaptability. However, at the hour when this publication is printed, eleven years have passed since and the variety has fully adapted. The cold winter of 2016 (-27°C) has just slightly affected some terminal parts of the one-year-old twigs, but in general we consider that it was a cold test that Chandler withstood greatly. At Voinesti Nurseries we use graftwood issued from plantations older than five years which gives a very good adaptational advantage over propagation material coming from warmer climates and thus our grafted trees inherit this important feature.

Being used to more traditional, vigorous varieties that don't necessarily require irrigation or intensive care, at the beginning we assumed that we could work with Chandler as with those varieties and over ten years of experience have proved that wrong. However, in rich soils with a consistent part of organic matter and with average rainfall over 500 mm we consider that irrigation offers a great productivity advantage, but is not vitally important.

Being a variety of low vigor, the grower has to take good care to avoid any situation that would limit or impede its growth. It regards the competition from weeds, fertilizer input, watering, proper training, foliar sprays to correct deficiencies and to add nutrients and keep the tree in permanent nutrient balance. Also, in colder climates with shorter vegetation period, Chandler requires a couple of foliar sprays with potassium and phosphorus by the end of the season to improve the hardening off of the annual shoots and increase its resistance to cold winters on cellular level.

*Chandler is a late variety and that is a great advantage not only in relation to late spring frosts that it avoids by leafing out later, but also because being late means it avoids bacterial and fungal inoculum happening earlier. However, if unattended chemically more than 2-3 years, in rainy years or in rainy regions, Chandler can become very sensitive to walnut blight (*Xanthomonas arboricola* pv. *juglandis*) and it becomes hard to cure, moreover it can develop into trunk cankers hard to treat. With *mancozeb* being removed from use and the general European tendency towards growing organic produce, we recommend growers to incorporate into their spraying programs preventive biological agents as *Bacillus subtilis*, *Pseudomonas fluorescens* and other antagonists that can significantly lower the incidence of the walnut blight.*

The productivity of a Chandler orchard is among the highest in walnut varieties. However, in later years we noticed a slight change in the consumer preferences of the Chandler walnuts in relation to its country of origin. When faced with the decision either to choose walnuts from regions and countries that prioritize very high productivity or the ones putting emphasis on organoleptic attributes, consumer tendency is to prefer the latter. Our approach to this complicated search of equilibrium is to limit the mineral fertilizer in favor of the organic, encourage more active pruning to reduce the total number of fruits but obtain bigger caliper, more taste and aroma in the remaining yield. In the long term this could prove to be a good strategy, in line with consumer expectations and preferences.

The walnut is of medium size, with weight ranging from 13 to 14g and 49% crack out. To this day, it is the variety with the highest output of light and extra-light halves.

Planting distances. A wide range of options are available, depending on what the grower's intentions are and on the soil nature. Most often we recommend 8x5 m to be a good compromise between the long and short term and that provides enough spacing for one tree to find light, space for canopy expansion and soil nutrients.









Seven year-old Chandler orchard in the south of France. Planting distances are of 7 x 4m (357 trees/ ha). Excellent control over the orchard helps the grower to maintain a very good phytosanitary status of the trees.

Tulare

American varieties

Tulare was obtained by crossed pollination of two varieties: Tehama and Serr, carried out in 1966 by Harold Forde. The variety was registered and released by the University of California in 1993. It has an upright growing habit, that makes it suitable for hedgerow orchards. It is a slightly more vigorous than Chandler, meaning that in more difficult conditions Tulare should be given preference over Chandler.

It is a midseason variety leafing 5 days earlier than Chandler. It is self-fertile and can also be a good pollinator for Chandler. It has lateral fruitfulness of 75%.

Tulare is a very productive variety, especially in very intensive orchard systems. According to the results of hedgerow trials carried out in Tulare County in California in the 1980s and 1990s, its productivity has surpassed all other varieties, including Chandler by as much as 50%. So, for very intensive systems this is a highly recommended variety.

In Moldova it was introduced for the first time in 2014 and continuously studied since then. We noticed a better vigor and arguably higher frost resistance than in Chandler. Also, another important comparative feature that emerged in 2021, a very specific year for Moldova due to a very rainy and slightly cooler summer. At the end of the season, on Chandler there was an important number of walnuts with not fully formed shell and the kernel of somewhat poorer appearance. In the same conditions, Tulare produced fully formed nuts, well-sealed shell and extra-light kernel whereas in hotter and dryer summers you would see better walnuts in Chandler. So, growers should take into consideration their local climate and properly choose the suitable variety.

The variety displays a very good resistance to anthracnosis and a fair resistance to walnut blight. In rainy springs its sensitivity to blight increases significantly and thus means of protection should be in place to prevent the spread of the bacteria.

The nuts are almost round with a generally attractive appearance and good size and caliper, with an average weight of 14-15 g and 53-54% crack out with 80% light and extra-light kernel. Timely harvest and proper drying will guarantee the preservation of an excellent kernel color throughout the season. We realized that Tulare is a very versatile variety in terms of sales: its big 34+ caliper is very interesting for buyers looking to sell in-shell and at the same time it can be used for kernel production with a 4% higher kernel output than in Chandler. We advise growers to consider seriously this variety for their orchards.

As with the other American varieties that we multiply, we use graftwood collected in mother plantations five years-old and more, adapted to our cooler climate. This adaptational feature is transmitted to the grafted trees and we believe that this is a great advantage that increase the chances that the trees would adapt rapidly to the colder regions of Europe where there's interest for planting walnut orchards.







Tulare is one of the leading American varieties, for both its high productivity, beautiful round walnuts of big caliper and a great kernel producer. It harvests 5 to 7 days prior to Chandler which makes it interesting especially in commercial orchards thus making a more efficient use of machinery and equipment.





Serr American varieties

Serr is an American variety created within a complex selection program lead by Serr and Forde. It resulted from a cross pollination done in 1958 between the varieties Payne and PI 159568. *Serr* was registered in USA in 1968.

Leafing out is early, or 12 days prior to Chandler. This makes it susceptible to anthracnosis and walnut blight, but also to coddling moth. It would seem that this is enough to discard the variety. However, its strong vigor and early harvest makes it very suitable in orchards without irrigation in arid regions with low rain frequency in the spring.

The variety is self-fertile and does not require pollinators. Growers in the USA report pistillate flower abortion on *Serr* that leads to important losses of yields. Nevertheless, French researchers that were studying the variety in France said to never have witnessed this problem in their orchards. And after almost a decade of observations in Moldova, we can say that we didn't notice this phenomenon either.

Serr was first introduced in Moldova in 2007. We started studying it in 2014, in a trial including Chandler and Tulare. If compared to older Moldovan varieties, *Serr* surpassed them in productivity, kernel light color and easiness of extraction. Also, it exhibited smaller vigor, better resistance to anthracnosis and to blight.

At the same time, it showed an excellent adaptation to drought in non-irrigated orchards. This is where it seemed to surpass Chandler and become a variety of choice. It has 55% lateral fruitfulness, significantly lower than Chandler's 90%. However, a variety unfit to grow in hard conditions will simply not fulfill its potential or will see it greatly reduced. On the other hand, *Serr*, described by one of its authors Harold I. Forde as "thriving in adversity", easily adaptable to grow and bear fruit in unfavorable conditions is an interesting alternative there where no irrigation is possible, where soils are poor or other limiting condition is present.

Serr has good blight resistance and a normal copper spray program is sufficient to efficiently control it. However, in rainy years, especially in rainy springs when disease pressure is higher, more tools should be put in place to prevent and control walnut blight, otherwise yield losses due to the disease can be disappointing.

The fruits are of a high quality: good size and caliper with an average weight of 14 g, good uniformity, thin shell with perfect seal. The kernel represents 57-58% and we see a mostly light to extra-light coloring.

Planting distances should be in line with Serr's more vigorous habit of growing. 8 m between rows and from 6 to 8 between trees, depending on soil's fertility (8x8 should be reserved for deep fertile soils) should provide a well-balanced spacing for a non-irrigated orchard. There's no real necessity in bringing nitrogen in the first 4 to 5 years, except if you're dealing with a poor soil.

Voinesti Nurseries is one of the few in Europe to have Serr mother orchards for graftwood and a consistent yearly production of *Serr* grafted trees. We see a particular interest and demand for *Serr* in the southern regions of Europe: southern Romania, Bulgaria, Greece and other countries where the dry climate and scarce irrigation water create the need for stronger varieties.







“Thriving in adversity” is how the Serr breeder summarized the essence of this variety. In our trials, poor soils or the driest summers have not seem to affect Serr trees in non-irrigated orchards, while able to carry the fruit up to harvest.





Fernor

French varieties

Fernor is a French walnut variety issued from a 1978 cross pollination between the varieties Lara and Franquette, registered in the plant varieties catalogue in 1995. This is truly a unique variety in which the French breeders succeeded to combine late leafing out and flowering, high pest and disease resistance, lateral fruit bearing and light or extra-light kernel color.

In Moldova the first orchards with Fernor were planted in 2006, so over sixteen years testing this variety enables us to come with some very well documented conclusions and opinions of its adaptability to various climates, from warm and humid to cold or dry. It has to be said that in the beginning the idea of planting Fernor in a climate reputedly colder and of hard continental character, compared to the milder one in southern France has sparked much argument and opposition. However, time proved this position wrong.

This has proved to be one of the most adaptive foreign varieties in our climate. It's very late bud break (later than in France by almost two weeks) and probably genetic constitution makes it an almost blight and fungal disease immune variety. Also, it proved to be almost unaffected by the codling moth. Its impeccable behavior and interaction with the environmental factors make it the best-known variety in our region to be grown as an organic crop. Indeed, very few treatments are necessary to keep walnut blight in control. Actually, in drier years, no copper sprays are needed. We know of Fernor orchards that have received no copper sprays in years and still show absolutely no visual traces of the disease.

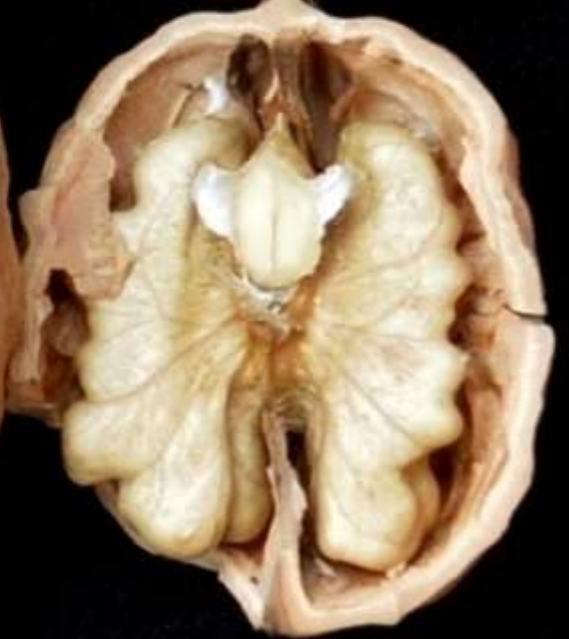
Fernor's vigor is inferior to Franquette's. Its growth habit is also different, with a columnar or pyramidal shape, making it suitable for higher densities in the orchards. When pruning we take this feature into account and do cuts to promote more wide angled branching. The trees have a rapid growth, especially in deep fertile soils. Fernor is very frost resistant, surviving without significant impact the winter of 2011 with temperatures going to -32°C which marked a record that not even the breeders were aware of. It also has good drought resistance with trees holding well with the only visible consequence of the fruits not reaching the desired caliper. So, irrigation is highly recommended.

Flowering is late, in Moldova's conditions by mid-May. This makes it the latest varieties of all that we tested. The breeders recommend associating Fernette as a pollinizer, a variety selected for such a purpose. However, our experience shows that in cooler climates it sets more fruit if using Meylannaise and Ronde de Montignac. It is highly fruitful on lateral buds, but the fruit set improves only with time, from the 5th year onward.

The fruit resembles very much the Franquette's. It is different though, with base and top more flatlined. Also, kernel is lighter with a top of the class quality, pleasant texture and fine flavor. A large majority of consumers whose opinions we asked said to prefer Fernor for its particularly tasty kernel. The fruit is of medium size, mainly 32-34mm caliper. The kernel crack out is 40-44%. The only drawback of the variety is the somewhat thicker shell that makes it more difficult to crack for the consumer. Of course, this is not a problem for industrial shelling.

The erect type of growing makes Fernor a suitable variety for intensive orchards. A density of 8x5 m (250 trees/ha) is advisable but only if irrigated. In regions with a minimum of 500mm yearly rainfall and fine-textured loamy soils with good water holding capacity non-irrigated Fernor orchards are feasible with recommended planting distances of 8x6/8 (bigger root nutrition area).







Left: bud break, the 4th of May.

Top: beautiful uniformly sized organic Fernor walnuts grown in Voinesci's orchards.

Right: ten years old non irrigated and non treated Fernor orchard in Moldova.



Lara

French varieties

Lara is a French variety obtained by direct sowing of Payne walnuts and selected in a walnut nursery. It was officially registered in 1985 and to this day it remains one of the top varieties cultivated in France and Europe.

It was first introduced in Moldova in the spring of 2006 when one of the first orchards with French varieties was planted. After seventeen years we have to say that this is truly a fine variety with beautiful fruits. These first orchards planted with Lara, Fernor and Franquette helped us conduct a long-term evaluation program on how these varieties adapt in the eastern-European continental climate. Also, it served as a verified initial source of graftwood.

*The tree has moderate vigor, has a semi-erect growth habit being easily trained as a central leader and in intensive hedgerow type of orchards. Bud break is late, six days after Chandler. It gives it protection from late spring frosts, the early walnut blight and fungal infections and makes it resistant to these main diseases. Nevertheless, young trees up to the third year can be quite sensitive to walnut blight that can seriously impede and delay tree growth. In our various trials, the most effective preventive method, that is also non chemical, are preventive sprays with products containing *Pseudomonas fluorescens* or *Bacillus subtilis*. Also, codling moth has rarely been a problem for Lara in Moldova. It is a hardy variety, having survived with minimal damages the winter of 2011 with temperatures of -32°C . **It needs pollinizers, Fernette, Franquette and Ronde de Montignac being the best match.***

Lara prefers deep rich soils and sufficient water to fulfill its potential. Provided with all growing conditions, it produces large round walnuts reaching 34-38mm in average. The shell is of average thickness, crack out is 47-49% with a pretty light kernel, but not as light as Fernor or Chandler. It is very appreciated as a fresh walnut due to its kernel skin not being bitter, so there's no need to peel it off.

*Planting density can go to as much as 408 trees per hectare (7x3.5m) there where all recommended technology is available and can be applied. We mean irrigation, nutrition program, proper training and regular pruning and, of course, plant protection measures are in place. However, we recommend 8x4 m or better 8x5 m as a good compromise that takes into account the fact that vegetative growth is hard to tame in older trees, especially **in limited spacing. Yields in Lara can be very high, up to 6 tons. In Moldova we've reached 4 tons by the 10th year.***

Walnut world markets have changed significantly in the last 20 years. Consumer quality standards and expectations have been constantly evolving with increased preference being given to walnuts of large caliper, superior to 34 mm. Varieties like Lara, although with kernel of medium quality, became more and more popular due to their large, eye-catching size. However, the decision to plant this variety should be based on the assurance of having the means in place and the willingness to give it all the necessary resources to reach the maximum walnuts size. Otherwise, the risk is to end up with an average sized nut and only relatively good kernel which will make it harder to sell.









With Lara it is critically important to conduct the harvest at the right time when the hull releases effortlessly the walnut. A little too early or a little too late and you end up with darker kernel that affects the commercial value of the product. If possible, manual sorting is recommended to remove dirty walnuts.



Pescianski

Moldovan varieties

Pescianski is a Moldovan walnut variety, resulted from the genetic improvement program lead by scientific researcher and biologist Victor Jadan. The variety was discovered in the local flora in 1970 and studied for ten years before its official registration in 1980. It was and still is considered the best all over 17 Moldovan varieties developed, for the high yields and excellent walnuts.

The trees are of medium to high vigor, similar to Hartley. It has a semi-erect growth habit, easily trained as a central leader. Unlike terminal fruit bearing varieties that have a clear apical dominance, Pescianski is different in that most of its lateral buds break into growth, either carrying fruit in the year of their first growth or in the following years. Thus, a bigger number of short twigs that are essentially elements for fruiting is what makes this variety so productive, even though it is only 40-50% fruitful on lateral buds.

Pescianski has moderate resistance to fungal diseases and walnut blight, phytosanitary treatments are thus essential for keeping trees and yield healthy. Nevertheless, fungal diseases are easily controlled with timely applied fungicides and blight is mostly prevented by well targeted copper sprays at bud break, before and immediately after flowering.

*Flowering is 7-10 days earlier than Chandler. Although the variety is partially self-fertile, we associate 3-5% pollinizers to increase yields. To maximize fruit set, we recommend spraying zinc products with an addition of organic fertilizers based on seaweeds (*Ascophyllum*, *Ecklonia*) as soon as flowering is over and the pistillate flowers turn brown. Afterwards, copper plus a systemic fungicide or an organic equivalent is recommended for a better control of *Xanthomonas juglandis* and fungal infections.*

Pescianski walnuts are of an exceptional quality: beautiful light kernel with unique tasting qualities, soft and smooth buttery texture and well-defined flavor. On average the nut weighs 14g and has 57% kernel. The shell is thin and easy to crack releasing the kernel with unparalleled easiness. In our various interactions with consumers, Pescianski was in the top three most appreciated walnuts. At the same time is one of the few varieties that can preserve the light color over long periods (almost for a year) of time without refrigeration. It is a universal variety to be marketed in-shell or shelled.

When deciding the orchard spacing for Pescianski one should keep in mind that this is a variety of medium vigor. In very rich soils it tends to sustain a continuous growth during the first 5-6 years. For such soils we recommend 8x7 or 8x8 m. On the contrary, in poorer soils its active growth lasts four years at most and the best option is 8x6 m.

Pescianski is a variety we an extended experience with. This is an early variety that can be harvested by mid-September and can provide fresh, ahead of season, exquisite walnuts that can supply either the markets or the needs of a home gardener. No matter the destination, this is one tree to definitely have in your orchard or collection.

Pescianski is registered in the European Union plant varieties catalogue since 2018.







Overall, Pescianski is one the best varieties developed in east-European countries. Highly drought resistant, frost resistant, fast growing, easy-to-train canopy, well-adapted to central leader training system. It has a fruit of big size, thin shelled, kernel of excellent color and taste. Its drawbacks: the sensitiveness to late spring frosts and fungal infections (anthracnosis, colletotrichum).



Ovata

Voinesti Nursery's varieties

Ovata is a variety registered & developed in Moldova and EU by Voinesti Nurseries and represents a specific and unique genotype for this species. The walnut is of a noble outlook, attractive color and size. The big fruit caliper (38 mm+) is what differentiates this variety from another. European walnut growers, especially amateurs, have greatly appreciated this variety.

The tree is of medium to high vigor, developing a round shape of tree that should be a determining factor on how the walnut grower should train his trees.

It is practically immune to diseases (walnut blight and most important fungal diseases) and *coddling moth*, no matter the environment, rainfall, air humidity or other stimulating factors. It has an outstanding resistance to deep winter, late spring or early autumn frosts, as well as an exemplary drought resistance. The original tree is said to have successfully withstood winter temperatures of **-36°C**.

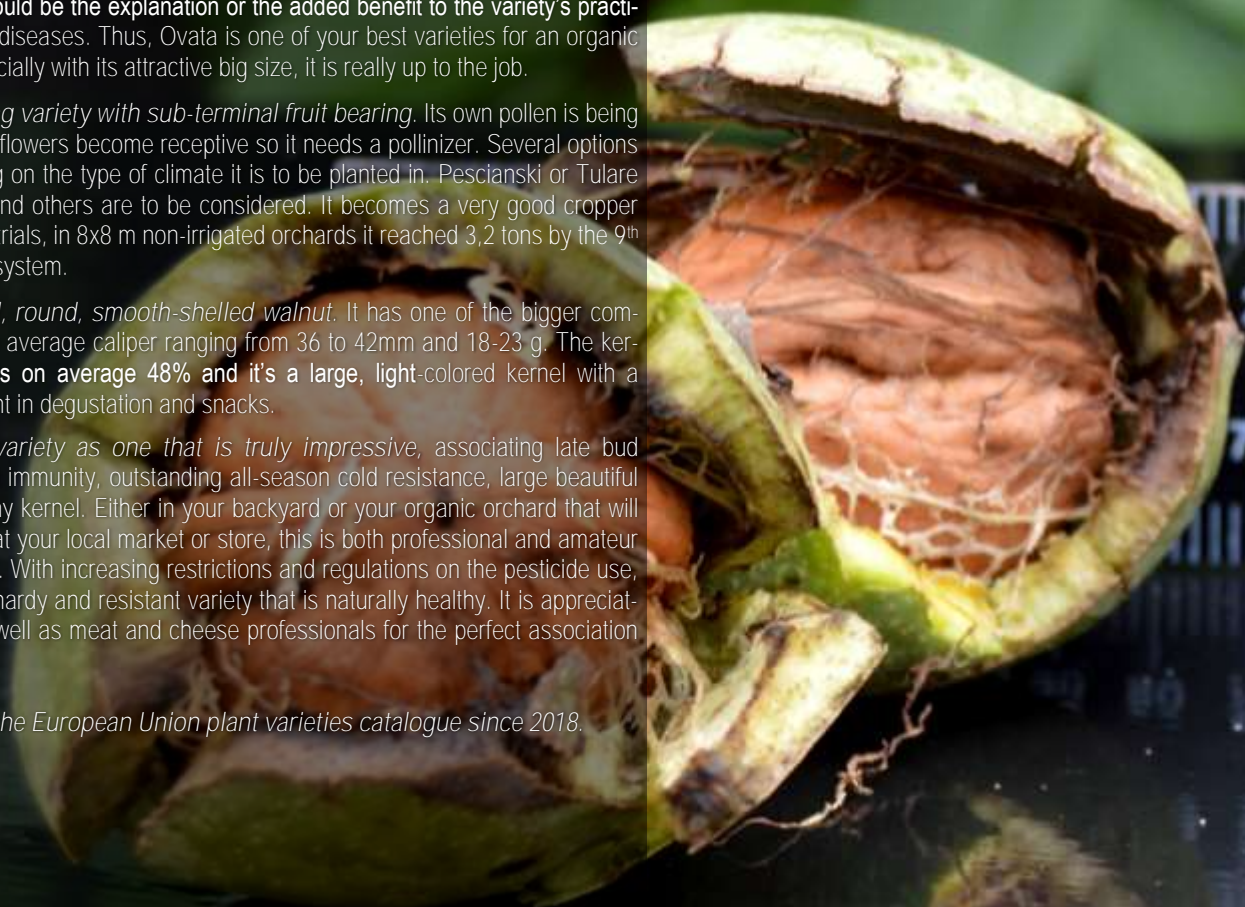
Bud break is unusually late for a variety of local origin, almost matching **Tulare's phenological stages**. This could be the explanation or the added benefit to the variety's practical immunity to pests & diseases. Thus, *Ovata* is one of your best varieties for an organic walnut production. Especially with its attractive big size, it is really up to the job.

Ovata is a late flowering variety with sub-terminal fruit bearing. Its own pollen is being shed before its pistillate flowers become receptive so it needs a pollinizer. Several options are available, depending on the type of climate it is to be planted in. *Pescianski* or *Tulare* are good associations and others are to be considered. It becomes a very good cropper by the 7-8th year. In our trials, in 8x8 m non-irrigated orchards it reached 3,2 tons by the 9th year in an organic (bio) system.

The fruit is a beautiful, round, smooth-shelled walnut. It has one of the bigger commercial walnuts with the average caliper ranging from 36 to 42mm and 18-23 g. The **kernel crack out represents on average 48%** and it's a large, light-colored kernel with a crunchy texture, excellent in degustation and snacks.

We recommend this variety as one that is truly impressive, associating late bud break, disease and pest immunity, outstanding all-season cold resistance, large beautiful walnut, tasty and crunchy kernel. Either in your backyard or your organic orchard that will harvest nuts to be sold at your local market or store, this is both professional and amateur variety at the same time. With increasing restrictions and regulations on the pesticide use, you will appreciate this hardy and resistant variety that is naturally healthy. It is appreciated by wine-makers, as well as meat and cheese professionals for the perfect association with their products.

Ovata is registered in the European Union plant varieties catalogue since 2018.





Carpatica

Voinesti Nursery's varieties

This is a huge one-of-a-kind variety. It is a truly unique walnut that we have found in the spontaneous flora of Moldova after many years of searching for a really big walnut. During this quest we have seen many interesting genotypes of a bigger than normal size, but none fulfilled our expectations. And then... when we almost gave up on the mission, we came across one that really enchanted our eyes! Later on, we registered Carpatica in the national catalogue of plant varieties in 2015.

We gave it the name Carpatica to evoke the greatness of the mountains that neighbor our region and the Carpatho-Danubian-Pontic space it was born into.

Some walnuts can measure up to 90 mm in length and a maximum of 55 g in-shell! It has a big kernel that can reach 18g. The kernel has a very sweet taste and has proved to be an excellent ingredient in the bakery where it suits perfectly with its hazelnut-like flavor. Another use of the variety was later identified. Everyone loves to peel the skin of a freshly harvested raw walnut when the season comes. Peeling a big and smooth Carpatica kernel is an easy task even for small children. We guarantee this is an exclusive experience to remember!

These walnuts are a perfect decoration element, naturally colored or painted in different colors. They make a great gift for friends and relatives and work colleagues. One can still implement new inspired usages with this walnut.

Bud break is early. This poses some risks of late springs. If available, use special treatments that help increase trees' resistance to this phenomenon. **Painting the tree and scaffold branches in white** can delay bud break by up to one week. The variety has terminal type of fruit bearing, but becomes very productive from the 7th year. Pistillate flower become receptive to pollen before its own pollen is being shed, so pollinators are required. We will supply what suits best the regional climate where the trees are to be planted.

The variety has medium vigor but given enough time it will eventually grow to reach a big tree. It has very good resistance to walnut blight and fungal diseases, generally we **don't recommend more than a couple of copper sprays and some measures** to be taken to prevent or control the coddling moth. It is highly resistant to early autumn frosts and deep winter frosts. It can be susceptible though to late spring frosts. Carpatica, as most cultivars that were selected from the local *Juglans* populations, has a very high tolerance to drought. Still, if we want the walnuts to reach their maximum gigantic size, a lack of water is detrimental. Moreover, for walnuts intended for show off and not for human consumption we suggest doubling the doze of fertilizer (especially nitrogen and potassium). Also, from mid-May to mid-July spray 3-5 times organic foliar fertilizers that promote cell division and **supply amino acids to the tree.** **Other interventions that enhance tree's metabolism** are mostly welcome. All of that should help one obtain fruits of unseen dimensions.

Recommended planting distances are 8x8 m (156 trees/ha). For small parcels distances can be reduced to 6 m and for solitary rows to 4 m.

Carpatica is registered in the European Union plant varieties catalogue since 2018.



Rubin

Voinesti Nursery's varieties

Rubin is a variety registered & developed in Moldova and EU by Voinesti Nurseries. It has been discovered in the local flora in 2017 and selected for its beautiful bright red colored kernels.

There are several red fleshed walnut varieties out there in the world. Rubin is probably the newest addition to this list. Nevertheless, when compared to other red varieties, **there's more contrast to its red color, especially in freshly harvested nuts. Its brightness is almost unreal.** One of the most common reaction people have when they see it for the first time is: "How did you manage to color it inside?" And they mean it!

The tree is a vigorous fast-growing type. Very hardy, it endures effortlessly the coldest winters. **It means it could be planted in the coldest climates. It's a drought resistant variety** too. Rubin is mid-late, six days prior to Chandler. The variety needs a pollinizer and we provide it. It has excellent resistance to walnut blight and fungal diseases. It is fruitful on terminal and sub-terminal buds. Entry into full production is in the 8th year and can potentially reach 2-3 tons/ha.

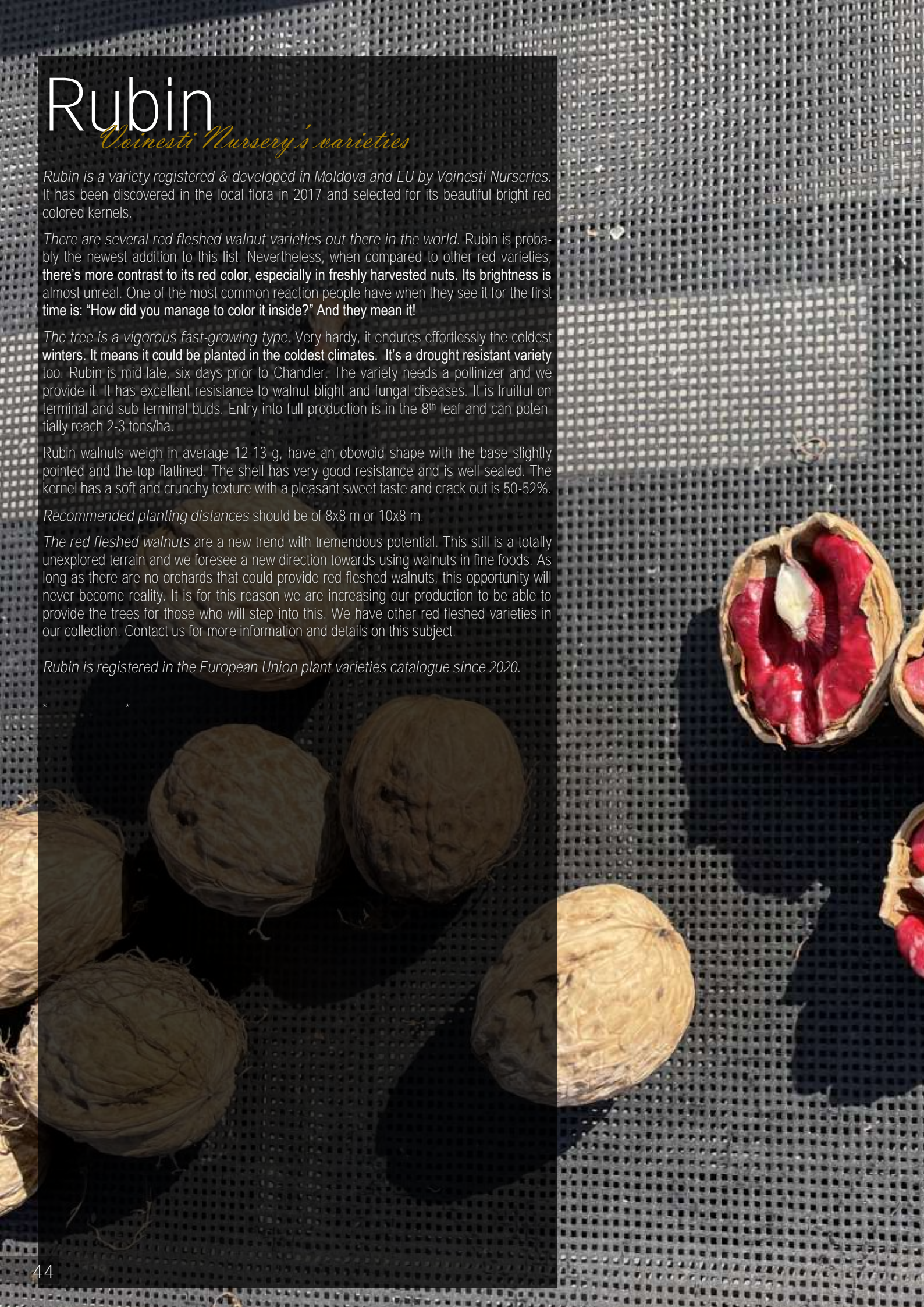
Rubin walnuts weigh in average 12-13 g, have an obovoid shape with the base slightly pointed and the top flatlined. The shell has very good resistance and is well sealed. The kernel has a soft and crunchy texture with a pleasant sweet taste and crack out is 50-52%.

Recommended planting distances should be of 8x8 m or 10x8 m.

The red fleshed walnuts are a new trend with tremendous potential. This still is a totally unexplored terrain and we foresee a new direction towards using walnuts in fine foods. As long as there are no orchards that could provide red fleshed walnuts, this opportunity will never become reality. It is for this reason we are increasing our production to be able to provide the trees for those who will step into this. We have other red fleshed varieties in our collection. Contact us for more information and details on this subject.

Rubin is registered in the European Union plant varieties catalogue since 2020.

* *







OUR WALNUT ORCHARDS

Chandler






Fernor

WE ALSO GROW WALNUTS

VOINEȘTI NURSERY OWNS 20 HECTARES OF WALNUT ORCHARDS

Besides the nursery, we own 20 hectares of walnut orchard already into production. We grow three main varieties:

 CHANDLER,  FERNOR and  PESCIANSKI. Our approach towards the growing method is prioritizing organic inputs and reducing to a critical minimum the chemical inputs so that our walnuts be as naturally tasty, organic and healthy as possible. We give preference to methods of pest prevention, work with manure instead of mineral fertilizers. This is something we endeavor to convey to the growers who buy planting material from our nursery in order that walnuts grown in Moldova comply with high quality and food safety standards. At the same time, our orchards represent an educational ground for many walnut growers from Moldova as well as neighboring countries.



LET US SUPPLY YOU THE BEST QUALITY IN-SHELL AND SHELLED WALNUTS!

Our production is about 60 tons in-shell walnuts per year. Our walnuts are harvested at the proper timing, then hulled, dried up and stored to preserve the best coloring, texture and aroma. Our collaboration with other growers enables us to mount up to 200 tons of walnuts per season, so get in touch with us if you're interested. **We can ship to any country in Europe and other parts of the world.**

Also, we are able to process the walnuts and supply the kernel.



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