who has made a life long study of horticulture and pomology, spent thousands of dollars in testing the different kinds of trees, and is public spirited enough not to study his own aggrandisement alone, but also to give his neighbours the benefit of his dearly bought experience. Thus to instruct and encourage them in the practice of a science which is rendered somewhat difficult by climatic influences, but which is attended by profitable result when properly performed, Mr. Dupuis is a public benefactor in this respect and deserving of the highest encomiums and success.

The nursery is a model of neatness and order, weeds are conspicuous by their entire absence, the trees are planted in rows at sufficient distances to allow the cultivator to work freely amongst them, and are labeled so plainly as so render errors in nomenclature impossible.

The system and order observed are at once enough to inspire purchasers with confidence, the trees show to better advantage, are more healthy, and free from insect or fungus than when the ground beneath them is covered with weeds.

The land of these nurseries is well adapted to the purpose, being composed of a sandy shale loam not too fertile but requiring the addition of some manure; which however is given moderately, because Mr. Dupuis (very wisely) does not desire a too vigorous or watery growth but wood which is perfectly matured.

As I before stated he puts all the new varieties he procures to this test, and if they will not survive it, discards them as worthless.

In one place were rows of apple trees, about 250 in each, planted four feet between the rows—and in order to ascertain the aptitude of trees growing on the same soil and exposure, different varieties were planted in each row. While adjacent rows of Baldwin, Gravenstiens, Greening, &c, were winter killed, Fameuse, Duchess, Tetofski, St. Lawrence, Wealthy and Golden russet were as sound and as vigorous as a Rock-maple.

In a new orchard of last year's planting containing 750 trees, the soil being rather loamy with gravelly subsoil, and with no protection except from the north, the rows of Wealthy were sound and vigorous and the Gravenstien all winter killed.

M. Dupuis says that with him apple trees are most in demand—the people generally prefer tall trees; many of them buy root grafts, cultivate them 3 years, then they transplant them into their orchards.

Good root-grafted apples are worth 1½ cent and after 3 year's culture they acquire a value of 40 to 50 cents. This is of much consequence to those planting large orchards, and careful gardeners do not lose more than 10 per cent of these trees. To show Mr. Dupuis' public spirit he also said: "Nursery men do not care to sell the root-grafts because they lose the profit of growing the trees, but I force the sale of root-grafts to induce people to plant orchards."

"It is also better for the dwellers in the North West, Manitoba, or in the remote Townships of this Province even, because the graft can be procured by mail. We received a single order for 15,000 root grafts from Elie Hardy of Ste. Anne de la Pérade. Hon. Louis Beaubien bought one lot of 4,000; 1000 for France."

I also obtained the result of Mr. Dupuis' experience as to the apples which have proved worthless on his grounds and all over the county, as no fruit of the varieties has been exhibited since the organization of the the l'Islet Horticultural in 1880. These are Baldwin, Talman's sweet, Rambo, R I. Greening; Gravenstien and Alexander only half-hardy.

On the other hand there is ample proof that Duchess, St. Lawrence, Astrachan or Peach, Wealthy and Golden russet are quite hardy and profitable.

Of Crabs Mr. Dupuis has proved Transcendant, Montreal Beauty, Whitney and Hyslop, the best.

Twenty varieties of apples and 8 of new Siberians, 1 and 2 years' from the graft, are being tried and promise well.

PLUMS.—Of these, the old Orleans blue and white are the most esteemed and barring accident farmers admit that they pay better than apples. Mr. Dupuis' plum orchard is quite extensive and gives promise of a good crop, he has not suffered from Black Knot at present nor curculio—no doubt due to the admirable cultivation of his land under the trees—he says however that the black knot is spreading and he fears its approach. A check has been given to this dire disease by cutting the diseased branches as soon as it appears; and to encourage this practice the Horticultural Society wisely offers a premium to those who bring the greatest quantity of black knot branches to the show ground; loads of which are being brought annually and destroyed. Last year some of the directors thought this a useless expenditure of money, but so certain was our friend of the efficacy of such a practice that he proposes to pay these premiums out of his own pocket rather than it should be abandoned.

BLACK KNOT IN THE PLUM AND CHERRY.—This mysterious and destructive disease has hitherto baffled the researches of men of science, most of whom have attributed it to the action of fungi, but the observation of Mr. Dupuis, of l'Islet, and of the farmers of that county, where plums are extensively grown, has made the highly important discovery that grubs are found in the knots. This, he considers, settles, the question that the knot is caused by a fly which deposits its eggs on the branch where the grubs or maggots are hatched, which, penetrating the bark, destroy or obstruct the sap vessels and the sap in its return, after being elaborated by the leaves, must find a new channel, being impeded in its course, and thus the knots are produced. Mr. Dupuis' theory is that the sap is poisoned by the knot and kills the branch below it, in this I differ with him. My idea is that the sap in its return does not pass the injured parts, and as it cannot descend to perform its natural function, namely the formation of new tissue to increase the bulk of the tree, forms the excrescence which is called black knot. I submit this theory with deference to better authority in the hope that the discoveries of Mr. Dupuis and his friends may lead to a discussion and more thorough scientific research of this matter of such vital consequence to the successful raising of plums.

The disease having been ascertained, remedy should be within our reach.

Mr. Dupuis suggests cutting off the knots in July while the maggot or worm is active and thus prevent its escape to perpetuate a family of future depredators. To cut them off in the fall or winter would be utterly useless, because by that time the maggots will have disappeared.

The importance of the proof that the disease is originated by an insect and is not a fungus, is in the fact that we thus obtain a clue to its treatment remedially and must use insecticides if we desire to check its ravages. The success attained by experimentation in the line of spraying for the destruction of apple scale, curculio, &c., &c., with Paris green, London purple, coal-oil emulsion or even soap-suds, leads me to the conclusion that the same result might be effected as regard the black knot if one of these were applied at the time the flies were depositing their eggs in the spring. Should the knots appear, cutting them off in July, as suggested, would destroy the insects which might escape the spraying, and it is to be hoped that persevering effort and well directed experiment may conquer the pest which makes the production of this delicious fruit so precarious and disappointing.

Plum culture should certainly be guarded with the most zealous care in this district, for it appears that many new