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**PEAR CLONAL ROOTSTOCKS PROPAGATION IN CONDITION
OF WESTERN FOREST-STEPPE ZONE OF UKRAINE**

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Raising a problem. The most common pear rootstocks in ukrainian horticulture are different pear seedlings and well known quince MA, which does not meet today's requirements for pear rootstocks. The main stream of pear production intensification in Ukraine, as well as in Europe – is establishing of new precocious, heavy cropping and easy to grow dwarfing and semi dwarfing orchards which should provide good productivity of high quality pears. The basic element for such orchard is low vigour rootstocks and demand for such rootstocks, as well as nursery trees on them, is constantly rising. Breeding programs of pear rootstocks in many countries constantly releasing a new types which must be tested for local ukrainian conditions to find the most suitable rootstock for further commercial production.

Research results. During 2015–2017 in research program of Horticulture Department of Lviv NAU we have been testing 10 different types of quince: A, provence, S₁, 4-6, BA-29, Cydo, Adams, C, Y, IS 2/10 propagated in stoolbed in conditions of Western Forest-Steppe Zone of Ukraine. Along the research programme we have studied their winter hardiness, growth features, ability to vegetative propagation by vertical layers (table 1).

Rootstocks of quince BA-29, provence, IS 2/10 and S₁ showed better ability to promote a new roots on vertical layers. Rootstocks of quince S₁ and IS 2/10 had less lateral branches, comparing to other quince types in our test. The most vigorous, among the other quince types, were quince Y, BA-29, provence and IS 2/10.

Conclusion. After all data analysis, by the combination of positive features, we have select the best quince types such as: IS 2-10, provence, S₁ and BA-29 which showed better productivity and growth habits than standard quince A.

Table 1

Pear clonal rootstocks growth in stoolbed (an average 2015–2017)

Rootstock	Time to start of roots growth, days	Maturity of rootstocks, mark (0-5)	Lateral branches, mark (0-5)	Rootstocks diameter, mm	Root system length, cm	Root system volume, mark (0-5)	Rootstocks height, cm	Length of rooted part of rootstock, cm	Production of standard rootstocks, pcs./1 plant
Quince A (s)	37	3,0	1,9	8,4	7,3	3,2	102,4	7,0	6,8
Provence quince	31	3,0	2,3	9,0	10,5	3,9	104,3	6,9	7,3
Quince S ₁	32	3,7	1,8	8,6	9,4	4,5	98,5	7,8	8,4
Quince 4-6	40	3,2	2,2	9,1	7,2	3,6	101,5	7,5	6,7
Quince BA-29	30	3,0	2,1	9,4	10,8	3,9	106,7	6,0	6,9
Quince CYDO	35	3,0	2,1	7,8	7,5	3,5	97,69	6,3	6,6
Quince Adams	34	3,2	2,0	8,2	7,1	3,0	99,3	5,8	5,8
Quince Y	39	3,3	2,3	10,5	7,4	3,0	116,8	6,0	3,8
Quince C	29	3,5	2,4	7,6	7,8	3,4	79,8	6,0	5,7
Quince IS 2/10	27	3,8	1,9	8,7	9,7	4,6	104,1	7,3	7,2

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