

Evaluation of Apple Cultivars for Hard Cider Production in the Northeast

Study conducted at Walden Heights Nursery Orchard Walden, VT 2021

Results by pH at time of pressing

Cultivar	pH at pressing
redflesh selkirk	2.71
white selkirk	2.71
wild - 308 -8	2.73
stowe crab	2.75
wild - rr4	2.79
wild -128	2.80
crab - bc101	2.83
sakhi	2.85
gopher	2.86
hiburnal	2.86
wild - 308 -4	2.86
wild - 497	2.86
crab - 911 yellow	2.87
wild - rr 8	2.87
atlas	2.88
antonovka 40	2.89
antonovka 925	2.89
boiken	2.89
crab 199B	2.89
cinnamin	2.90
walden greening	2.90
wild - 19	2.90
wild - rr 1	2.90
crab 128	2.92
wild - 308 -6	2.92
no peace	2.93
amsib	2.94
anoka	2.94
antonovka autumn	2.94
hiburnal	2.94
wild - 308 -5	2.94
wild - rr 2	2.94
radiant crab	2.95
parkland	2.96
wild - 473	2.96
wild - 20011	2.97
antonovka 37	2.98
crab - 821	2.98
milwaukee	2.98
walden calville	2.98
wild - 308 -7	2.99
bedford	3.00
crab - 542	3.00



This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, through the Northeast Sustainable Agriculture Research and Education program under subaward number FNE20-960.

The Project Leader would like to express gratitude to study Technical Advisor, Terence Bradshaw (Research As.Professor, Dept of Plant & Soil Science, UVM) and the students at the University of Vermont Food Lab.

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

Todd Parlo conducted this study and has worked in plant science for the past thirty years. His family established Walden Heights Nursery and Orchard (WHNO) twenty-five years ago, in Walden VT (US zone 3). WHNO includes a fruit tree arboretum of more than 600 distinct apple varieties, and includes thousands of established fruit trees, bushes and vines managed under certified organic practices, sustainable agriculture, and permaculture principles. The farm has a processing component and storage facility for cider production. WHNO is also a propagation-style nursery, producing stock for farm use and sales - local retail and online. Additionally, WHNO offers consulting, educational workshops, and other services. www.WaldenHeightsNursery.com

Evaluation of Apple Cultivars for Hard Cider Production in the Northeast

Study conducted at Walden Heights Nursery Orchard Walden, VT 2021

Results by pH at time of pressing

Cultivar	pH at pressing
wild - 440	3.00
crab- 950	3.01
creekside	3.01
lodi	3.01
wild - 308 -2	3.02
bedford	3.03
bud 490	3.03
citrus 932	3.03
wild - 172	3.03
wild - bg	3.03
redrock	3.04
scott winter	3.05
ugly antonovka	3.05
mac imperial	3.06
prairie spy	3.06
wild - rr10	3.06
ashmead's kernal	3.07
false yarlington	3.07
wolf river	3.07
collet	3.08
redhook	3.08
wild - rr yellow	3.08
wild by anoka	3.08
severny sinap	3.10
wild - 20015	3.10
wild - 308 -10	3.10
chenango strawberry	3.11
columbia crab	3.11
crab -507	3.11
honeycrisp	3.11
ribston pippin	3.11
antonovka 48	3.12
cranberry	3.12
greening	3.12
morden	3.12
wild - 308 -9	3.12
wild yellow	3.12
white pippin	3.13
wild - 77	3.13
arlie's redflesh	3.14
citrus 932	3.14
fantazja	3.14
smokehouse	3.14
almata	3.15

Evaluation of Apple Cultivars for Hard Cider Production in the Northeast

Study conducted at Walden Heights Nursery Orchard Walden, VT 2021

Results by pH at time of pressing

Cultivar	pH at pressing
carroll	3.15
haralred	3.15
pomme gris	3.15
wild - rumpus	3.15
crabapple	3.16
shiawassee	3.16
wild - 472	3.16
crab - backyard redflesh	3.17
kazakh 761	3.17
wild - apple house	3.17
75414	3.18
fireside	3.18
northwest greening	3.18
red baron	3.18
redhook	3.18
spencer	3.18
antonovka 114	3.19
redfield	3.19
wild - 308 -3	3.19
75414	3.20
ellison's	3.20
liberty	3.20
severny sinap	3.20
wild	3.20
benoni	3.21
early harvest	3.21
jubilee	3.21
kazakh 739	3.21
kerr seedling	3.21
wedge	3.21
empire	3.22
wild - 376	3.22
cranberry	3.23
norland	3.23
white pippin	3.23
wild -583	3.23
wild apple	3.23
antonovka 1.5	3.24
bud 118	3.24
crab soc-12	3.24
howgate wonder	3.24
anaros	3.25
antonovka michurin	3.25
crab - 835	3.25

Evaluation of Apple Cultivars for Hard Cider Production in the Northeast

Study conducted at Walden Heights Nursery Orchard Walden, VT 2021

Results by pH at time of pressing

Cultivar	pH at pressing
golden russet	3.25
hewesmata crab	3.25
morden 359	3.25
newt grindle	3.25
swayzie	3.25
wagener	3.25
wolf river	3.25
36-305	3.26
anisim	3.26
audrey transparent	3.26
black oxford	3.26
breaky	3.26
columbia crab	3.26
island gold	3.26
ranetka crab	3.26
wild - 308 -1	3.26
alexander	3.27
bleeding antonovka	3.27
haralson	3.27
hubbardston nonesuch	3.27
karmijn de sonneville	3.27
minnehaha	3.27
noran	3.27
redfree	3.27
erwin bauer	3.28
purple mac	3.28
somerset of maine	3.28
wild - 766	3.28
garland	3.29
morden	3.29
red wealthy	3.29
74818	3.30
autumn arctic	3.30
false freedom	3.30
fameuse	3.30
honeygold	3.30
jubilee	3.30
leo	3.30
wealthy	3.30
yellow prunifolia	3.30
antonovka 109	3.31
antonovka 54	3.31
beautiful arcade	3.31
crab - 9442	3.31

Evaluation of Apple Cultivars for Hard Cider Production in the Northeast

Study conducted at Walden Heights Nursery Orchard Walden, VT 2021

Results by pH at time of pressing

Cultivar	pH at pressing
dayton	3.31
equinox	3.31
red burke	3.31
red prunifolia	3.31
rogers red	3.31
white angel	3.31
macfree	3.32
macoun	3.32
redfree	3.32
russet 262	3.32
westfield snf	3.32
chenango strawberry	3.33
crab - so-2	3.33
mac summerland red	3.33
parkland	3.33
antonovka 81	3.34
sweet 16	3.34
dolgo 299	3.35
mcintosh	3.35
williams pride	3.35
crab - gbr-21	3.36
dakota	3.36
irish peach	3.36
island winter	3.36
kitchell yellow	3.36
norson	3.36
novamac	3.36
scott winter	3.36
antonovka 88	3.37
blue pearmain	3.37
davey	3.37
harcourt	3.37
almey crab	3.38
ashmead's kernal	3.38
cox's orange pippin	3.38
frostbite	3.38
malinda	3.38
pixie crunch	3.38
pound sweet	3.38
renet bergamotnyj	3.38
sweetcrab	3.38
crab - so-3	3.39
hewes crab	3.39
marlin stephens	3.39

Evaluation of Apple Cultivars for Hard Cider Production in the Northeast

Study conducted at Walden Heights Nursery Orchard Walden, VT 2021

Results by pH at time of pressing

Cultivar	pH at pressing
ottawa	3.39
rouville	3.39
shay	3.39
wodarz	3.39
cortland	3.40
opalescent	3.40
pomme gris	3.40
oxbo	3.41
safstaholm	3.41
winter banana	3.41
75414	3.42
burgundy	3.42
russet - 952	3.42
hazen	3.43
hyslop	3.43
sunrise	3.43
williams pride	3.43
yarlington mill	3.43
connell red	3.44
crab 341b	3.44
vista bella	3.44
snowsweet	3.45
spartan	3.45
stone	3.45
arlie's redflesh	3.46
keepsake	3.46
goldrush	3.47
oriole	3.47
walden golden	3.47
ashmead (3 sisters topgraft)	3.48
blue pearmain	3.48
lord lambourne	3.48
niagara	3.48
priscilla	3.48
quinte	3.48
gingergold	3.50
lowland raspberry	3.50
muscadet de dieppe	3.50
summerred	3.50
dakota	3.51
gruzhova of moscow	3.51
magog redstreak	3.51
treehouse duchess	3.51
green peak	3.52

Evaluation of Apple Cultivars for Hard Cider Production in the Northeast

Study conducted at Walden Heights Nursery Orchard Walden, VT 2021

Results by pH at time of pressing

Cultivar	pH at pressing
mantet	3.52
ozark gold	3.52
peterson	3.52
75413	3.53
ranetka 9777	3.53
regent	3.53
britemac	3.54
hardy cumberland	3.54
twenty ounce	3.54
centennial	3.56
chestnut crab	3.56
hawaii	3.56
bethel	3.57
antonovka 126	3.59
big red duchess	3.59
crab -341	3.59
greensleeves	3.60
norda	3.62
morden 363	3.64
slovianka	3.65
dudley winter	3.66
reine de pomme	3.67
freedom	3.71
elstar	3.75
magog redstreak	3.75
wild - 79	3.75
beautiful arcade	3.77
nova easygro	3.77
red astrachan	3.78
gala	3.83
whitney	3.83
croncels	3.88
martha	3.89
american beauty	3.90
Niedzwetzkyana	3.91
golden lights	3.95
melba	3.98
wodarz	4.00
wild -438	4.02
two trunk bittercrab	4.25