

[Home \(ijor.aspx\)](#) [About us \(ijor.aspx?target=about\\_us\)](#) [My Profile \(ijor.aspx?target=users\\_zone\)](#) [Registration \(ijor.aspx?target=register\)](#) [Products](#)

[Article Submission \(ijor.aspx?target=manuscript\\_submission\)](#) [Usage Statistics \(https://c5live.mpsinsight.com/ijc/login\)](#) [Price List 2021 \(../JournalsPriceList.aspx\)](#)

[Contact Us \(ijor.aspx?target=contact\\_us\)](#) [Tutorial](#)

[Login/Register \(Ijor\\_homemenucontrol/#](#)

Email id

**PROGRESSIVE  
HORTICULTURE**

Progressive Horticulture  
Year : 2007, Volume : 39, Issue : 2  
First page : ( 101) Last page : ( 117)  
Print ISSN : 0970-3020. Online ISSN : 2249-5258.

[Journal Home \(?target=ijor:pho&type=home\)](#)  
[Current Issue \(?target=ijor:pho&type=current\\_issue\)](#)  
[Archive / Issues \(?target=ijor:pho&type=archive\)](#)  
[TOC \(?target=ijor:pho&volume=39&issue=2&type=toc\)](#)  
[Next Article \(?target=ijor:pho&volume=39&issue=2&article=002\)](#)  
[Registration \(?target=register\)](#)  
[Subscribe \(?target=ijor:pho&type=subscribe\)](#)  
[Editorial Board \(?target=ijor:pho&volume=39&issue=2&type=eboard\)](#)  
[Aims & Scope \(?target=ijor:pho&type=aimsnscope\)](#)  
[Author Guidelines \(?target=ijor:pho&volume=39&issue=2&type=for\\_authors\)](#)  
[News & Events \(?target=ijor:pho&type=newsnevents\)](#)  
[Subscribe TOC Alerts \(?target=ijor:pho&type=toc\\_alerts\)](#)

**Article  
Submission**

[\(target=ijor:pho&type=onlinesubmission\)](#)

FREE

[Sample Issue \(?target=ijor:pho&type=sample\\_issue\)](#)

[Trial Access \(?target=ijor:pho&type=trialaccess\\_issue\)](#)

## Effect of plant architecture on the performance of high-chill pear cultivars topworked on a low-chill subtropical pear

Yadav Ashish<sup>1</sup>, Yadav Anand K.<sup>2</sup>, Bist L. D.<sup>3</sup>

<sup>1</sup>Field Research Laboratory, Defence Research and Development Organization, C/O 56 APO, Leh-Ladakh, Jammu and Kashmir India

<sup>2</sup>Agricultural Research Station, Fort Valley State University, Fort Valley, Georgia, USA

<sup>3</sup>Department of Horticulture, G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India.

Online published on 5 April, 2012.

### Abstract

Cultivation of pears in subtropical regions began with the advent of low-chill pear cultivars which produced fruit with quality inferior high-chill European/Oriental pears. Thus, the best way to produce better quality fruit of high-chill pears in subtropics would be by topworking them on to the low-chill pears. To attain this, pruned wood with spurs of high-chill Doyenne du Comice (DCP) and Vic pear (VP) cultivars were collected in January from Horticultural Experiment and Training Center, Chaubatia, India (6825' above M and tongue grafted on low-chill Pant Pear-18 (PP-18). Both the scions were grafted at different heights on the rootstock trees used and 100 cm's long stocks on Tatura trellis-trained PP-18 trees at the Horticulture Research Center, Pathar Chatta (760' above M). More than 90% grafts of both DCP and VP pears succeeded and produced high quality fruits; however, DCP grafts had an edge over VP scions. Both high-chill cultivars topworked on 25 cm stocks had better graft success than the scions topworked on 100 cm stock. The increase in topworking heights on stock trees reduced the number of floral spurs in both high-chill DCP and VP scions. Per cent fruit retention in both high-chill scions grafted on 25 cm stocks was higher than those scions grafted on 100 cm stocks. With the incremental height of top working, fruit yield in both DCP and VP scions were significantly curtailed irrespective of the stock length used for grafting. Fruit quality attributes assessed by organoleptic testing and TSS, total sugars, acidity and ascorbic acid content were better for both DCP and VP than for PP-18 as well as other local subtropical pear cultivars. The reuse of previous year's scion topworked even after artificial chilling and/or GA<sub>3</sub> treatment in order to supplement chilling exhibited no fruiting advantage over thin grafting using fresh scions. Feasibility and advantages of a high quality pear production system evaluated in the subtropics are discussed relative to grower profitability.

[Buy Now](#)

[PDF](#)

[\(target=ijor:pho&volume=39&issue=2&article=001&type=subscribearticle\)](#) [\(target=ijor:pho&volume=39&issue=2&article=001&type=](#)

|| [Site map \(ijor.aspx?target=site\\_map\)](#) || [Privacy Policy \(ijor.aspx?target=privacy\\_policy\)](#) || [Copyright \(ijor.aspx?target=copyright\\_disclaimer\)](#) || [Terms & Conditions \(ijor.aspx?target=terms](#)

Page Rank 5 (http://www.prchecker.info/)

504,934,081 visitor(s) since 30<sup>th</sup> May, 2005.

All rights reserved. Site designed and maintained by DIVA ENTERPRISES PVT. LTD. (http://www.divan.in).

Note: Please use Internet Explorer (6.0 or above). Some functionalities may not work in other browsers.