

PLEASANT HILL (PHILL) NUTRIENT MANAGEMENT SITE



Management Effects on Forest Productivity

5 and 10-Year Results from the Nutrient Management Study

Intermountain Forestry Cooperative

March 24, 2020



1980-2020

Evaluate the effects of forest management operations on forest productivity.

- TREATMENTS (6):
 - No Slash (NS) – **No Slash** Retention
 - Whole Tree Harvest (WTH) – **Low Slash**
 - Bole Only Harvest (BOH) - **High Slash**
 - **No Veg (NVC) & Veg (VC) Control**



Treatments (6)

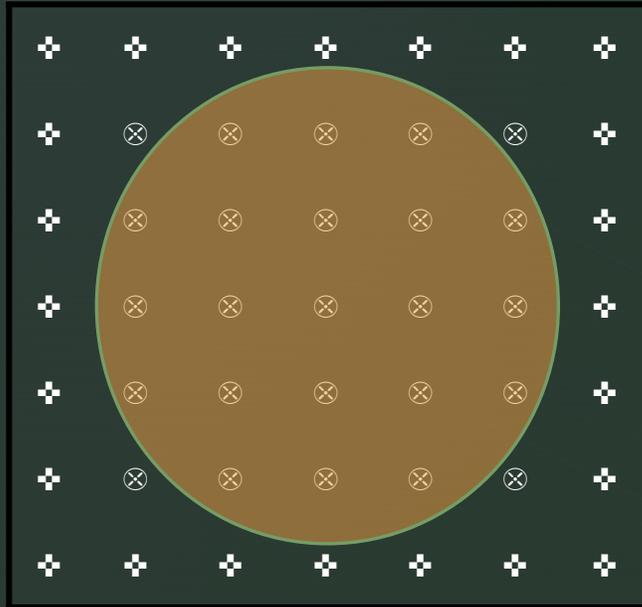
- **NSNVC** - No Slash / No Veg Control
- **NSVC** – No Slash / Veg Control
- **WTNVC** – Whole Tree / No Veg Control
- **WTVC** – Whole Tree / Veg Control
- **BONVC** – Bole Only / No Veg Control
- **BOVC** – Bole Only / Veg Control

**Whole Tree
Harvest**

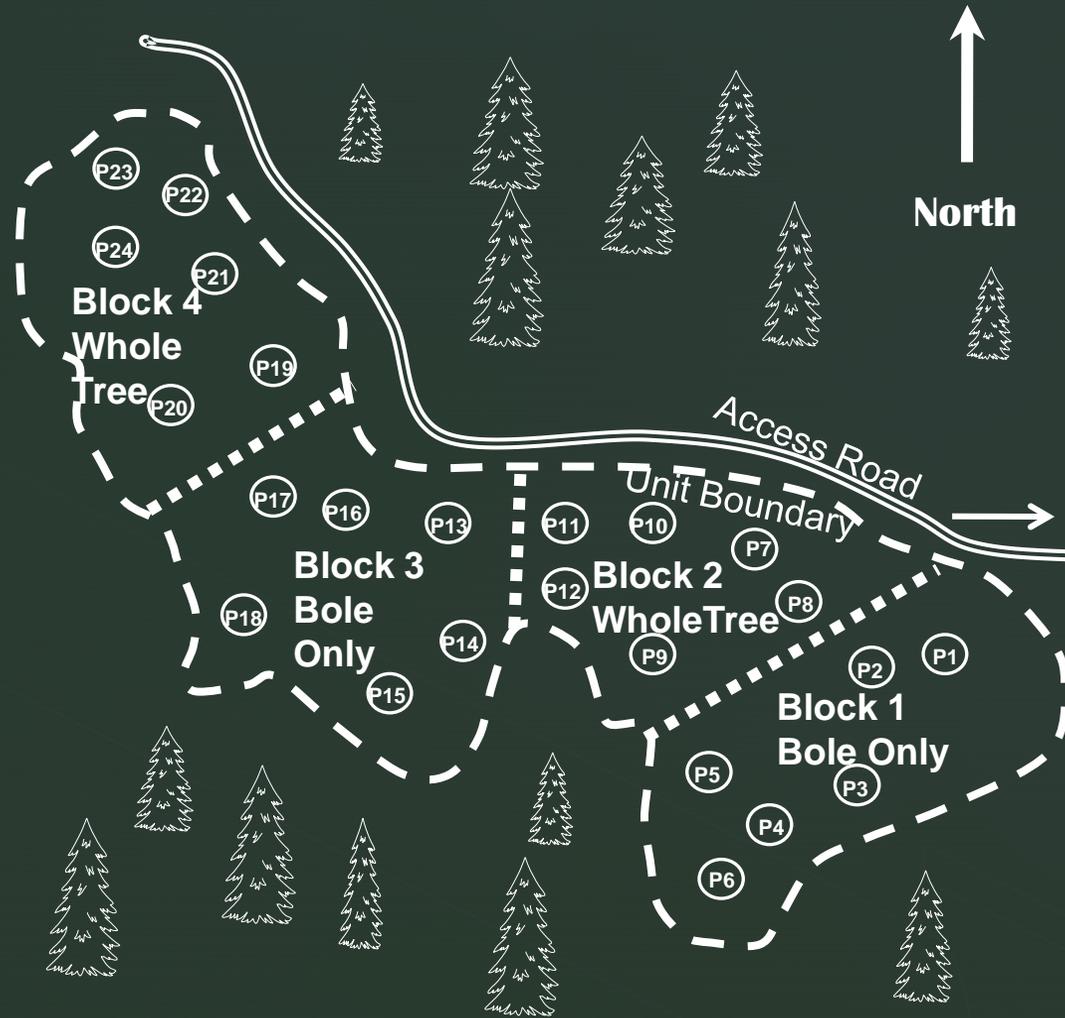


**Bole Only
Harvest**

STUDY LAYOUT



21 Douglas-fir Monitoring Trees



Soil Parent Material and Site Productivity

Sites	Parent Material (PM)	Site Productivity
Canus	Ash/Basalt	High
Loon	Ash/Basalt	High
Slice	Ash/Glacial/Quartzite	Med-High
Phill	Mix/Basalt	Med-Low
Lovell	Metasedimentary Quartzite	Low
Ruby	Metasedimentary Quartzite	Low

VOLCANIC ASH CAP
GREAT!



BASALT (Good)



**METASEDIMENT
Quartzite (Bad)**

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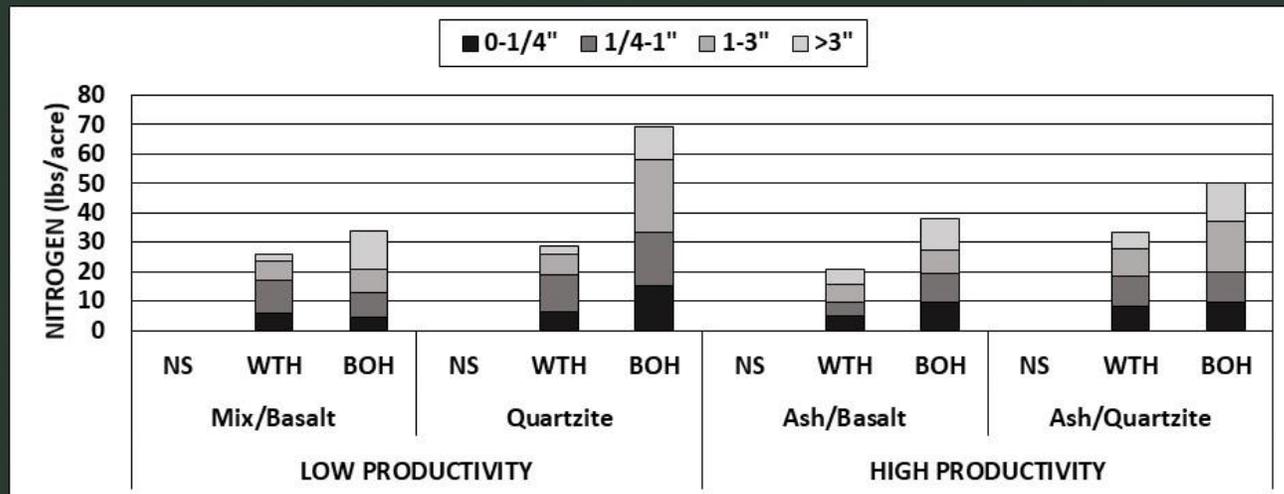
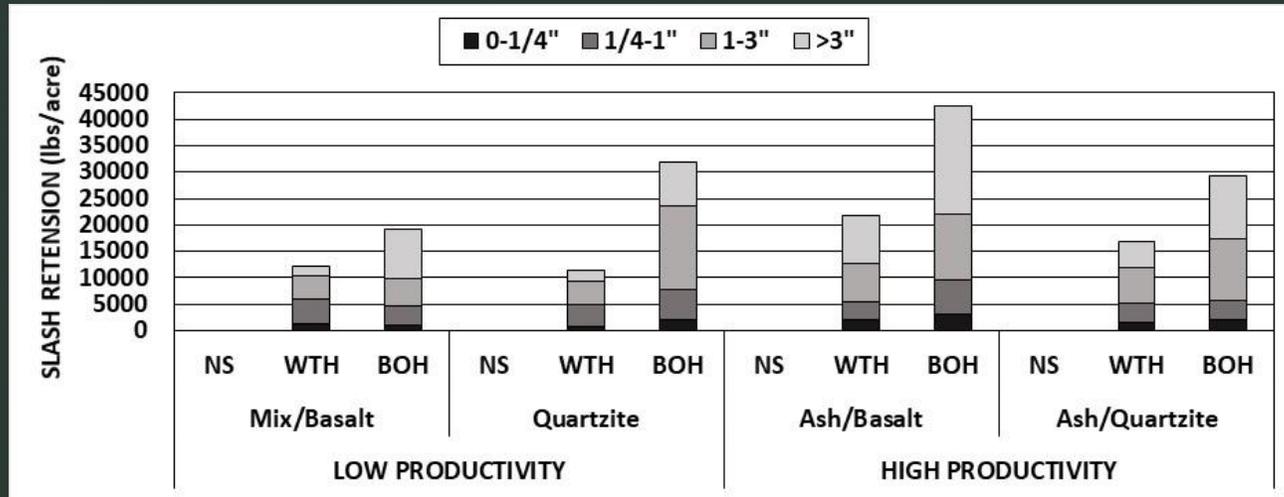


BASALT (Good)

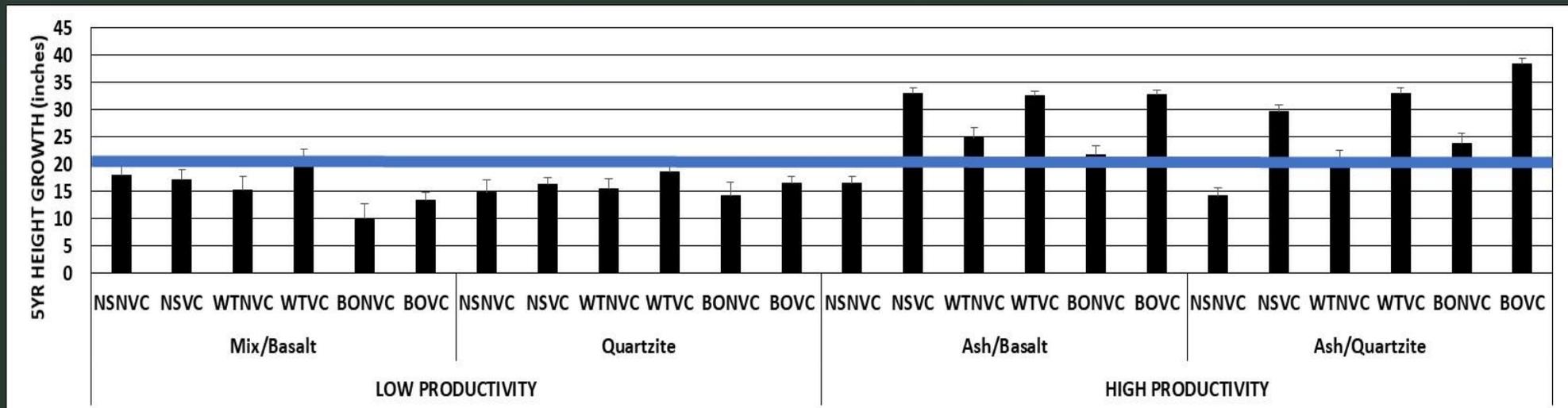
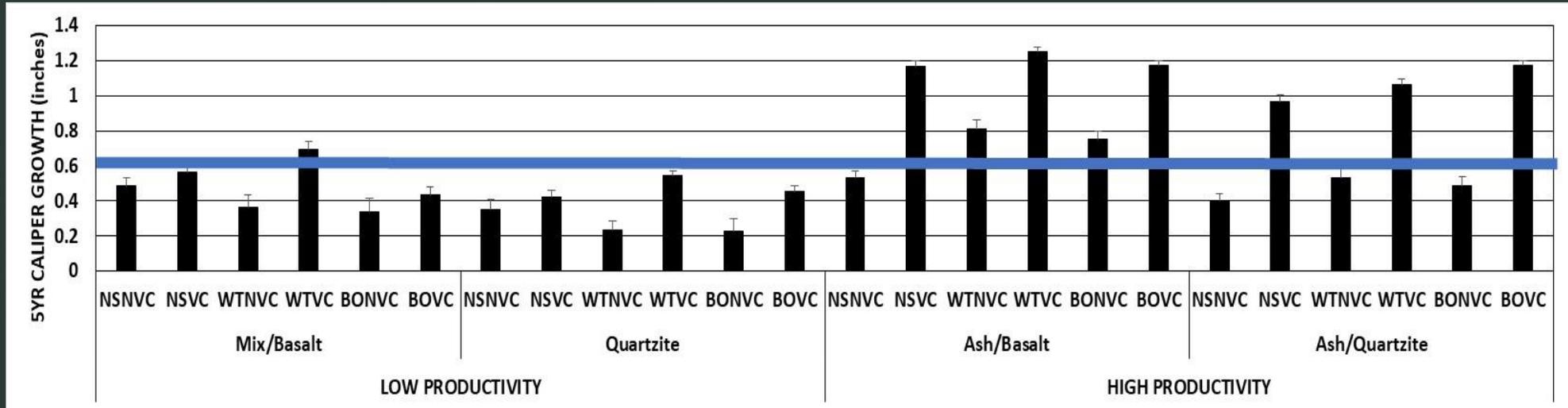


**METASEDIMENT
Quartzite (Bad)**

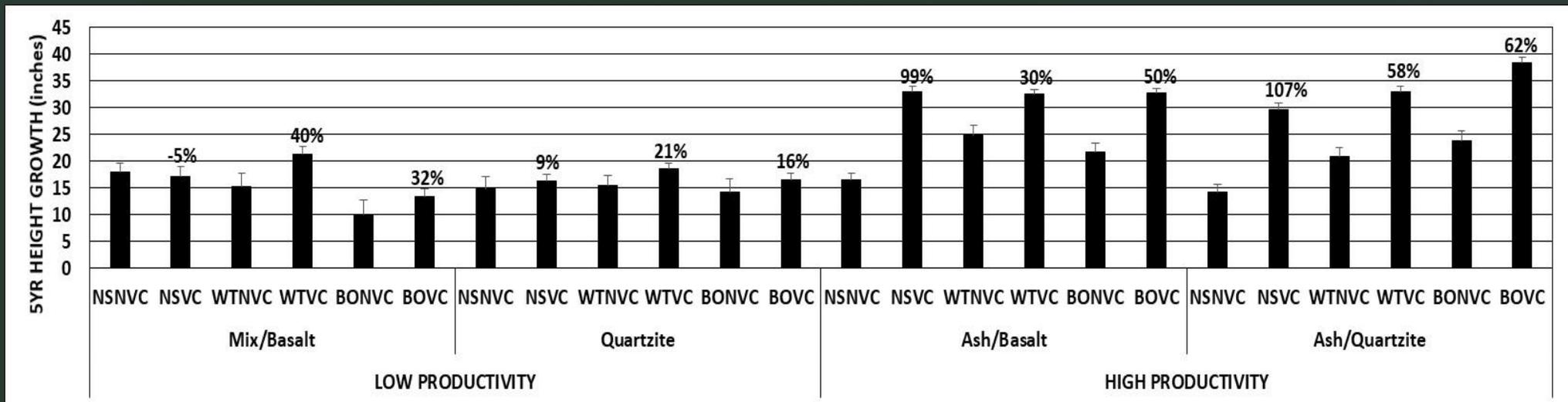
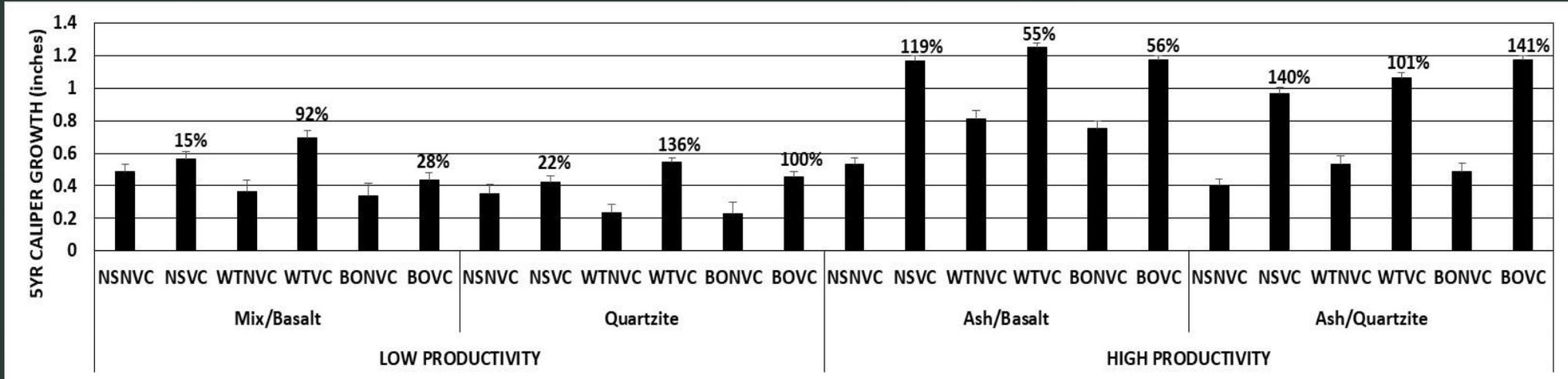
Slash and Nutrient Retention by Harvest and Productivity Type



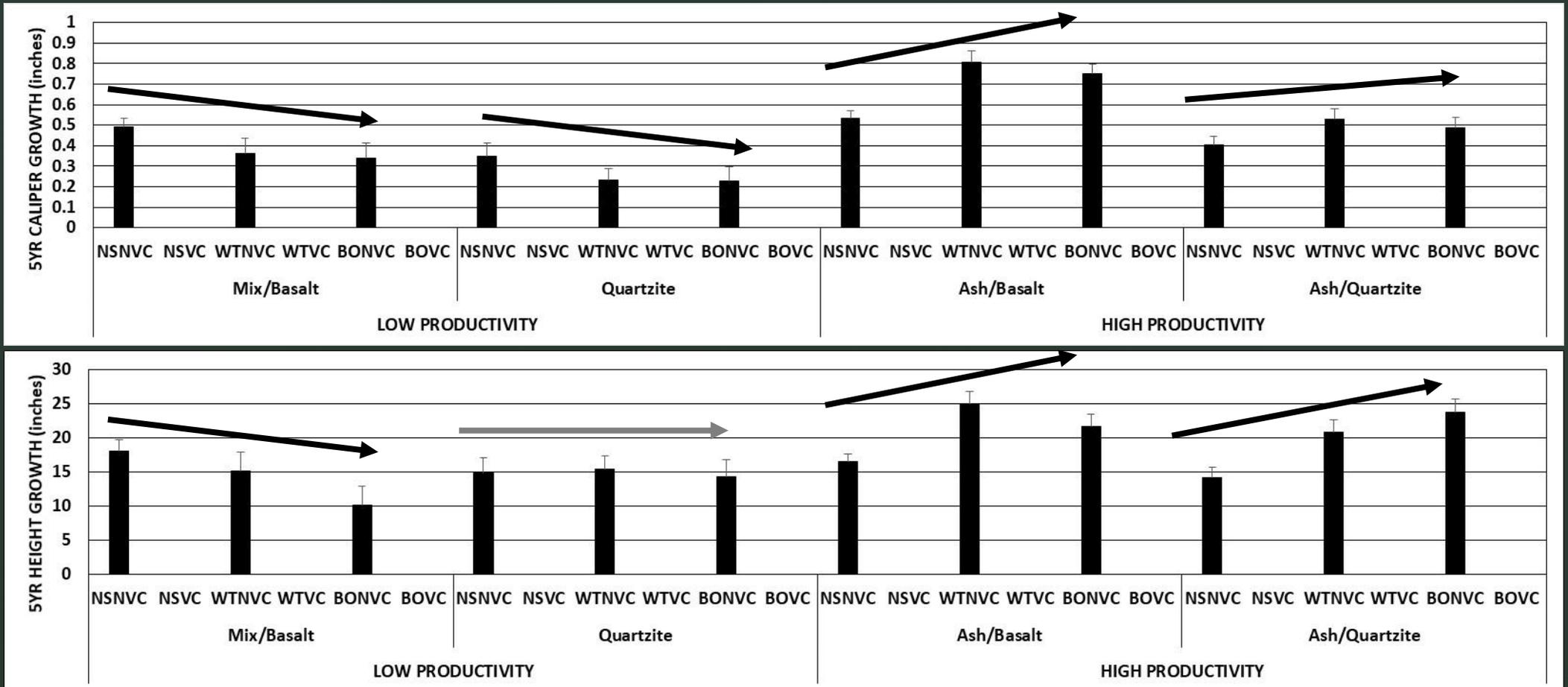
5YR Caliper and Height Growth by Harvest and Productivity Type (Productivity & Veg Control)



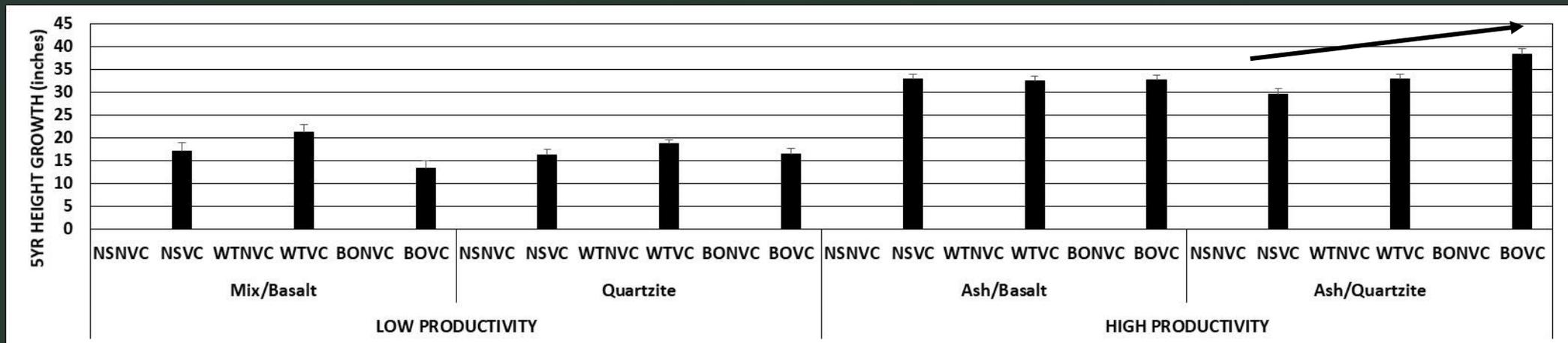
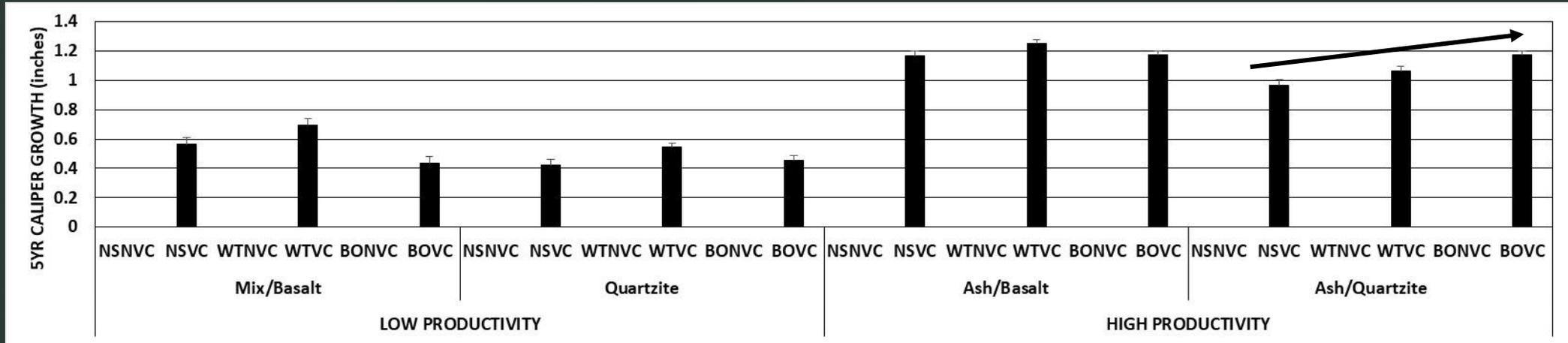
5YR Caliper and Height Growth by Harvest and Productivity Type (Vegetation Control)



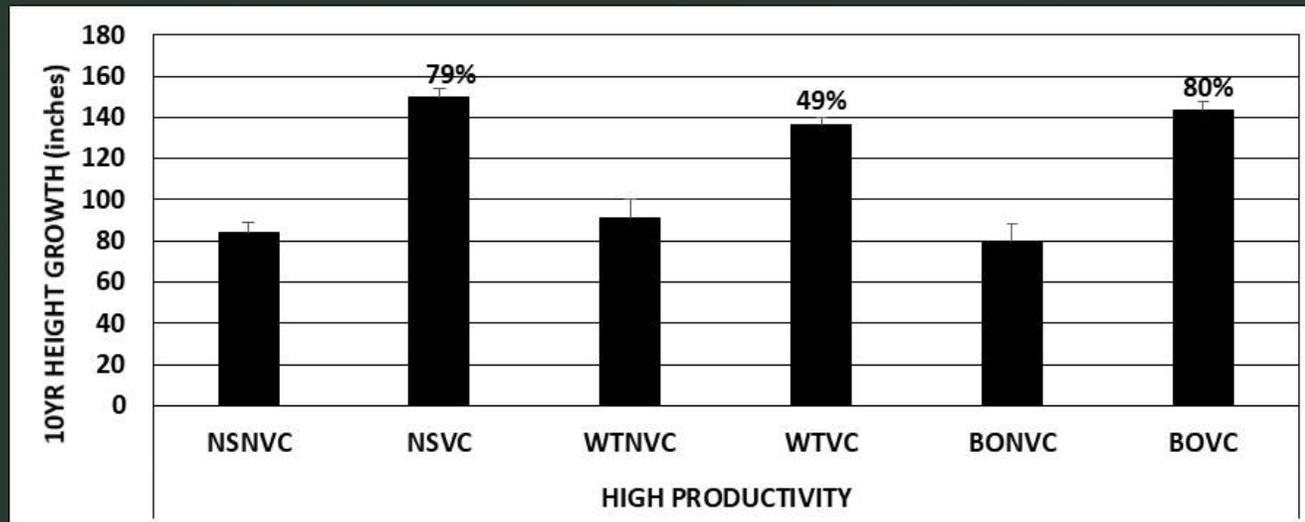
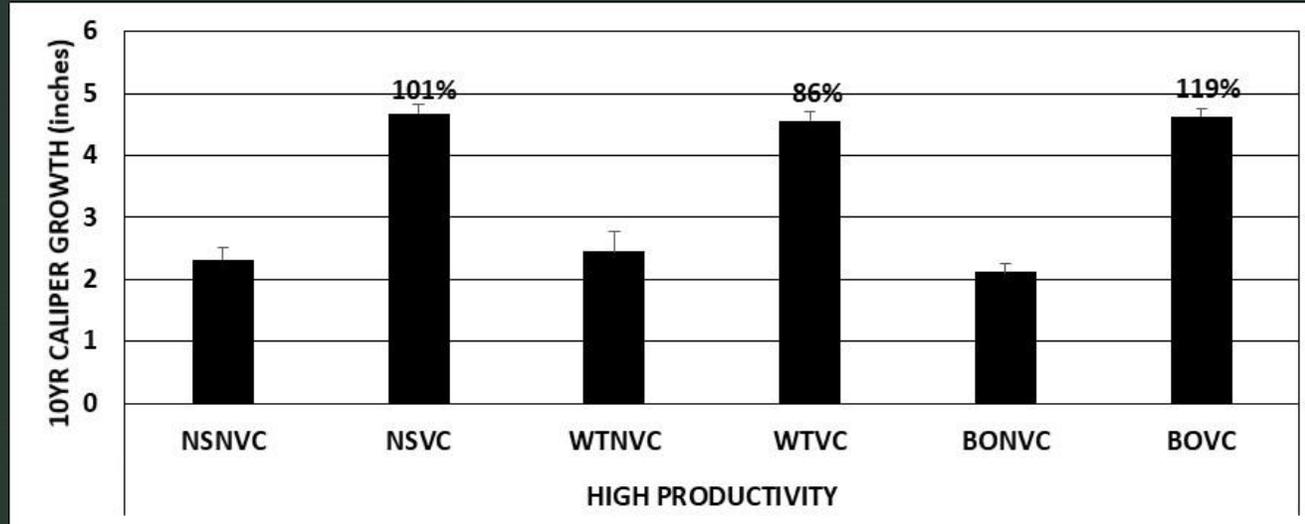
5YR Caliper and Height Growth by Harvest and Productivity Type (*NVC* x *PM* x Productivity Type)



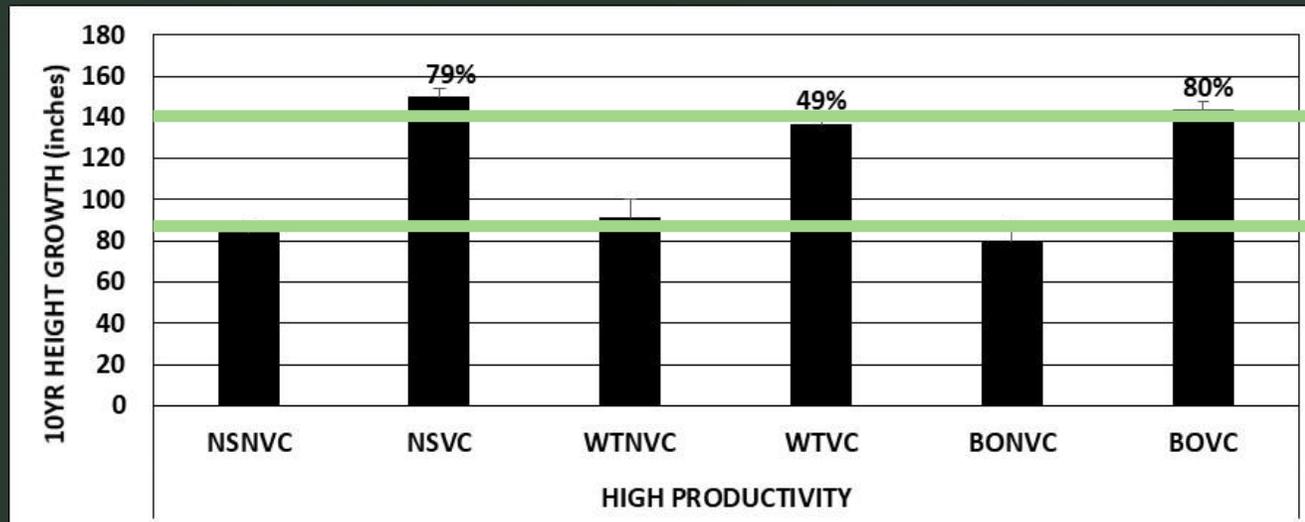
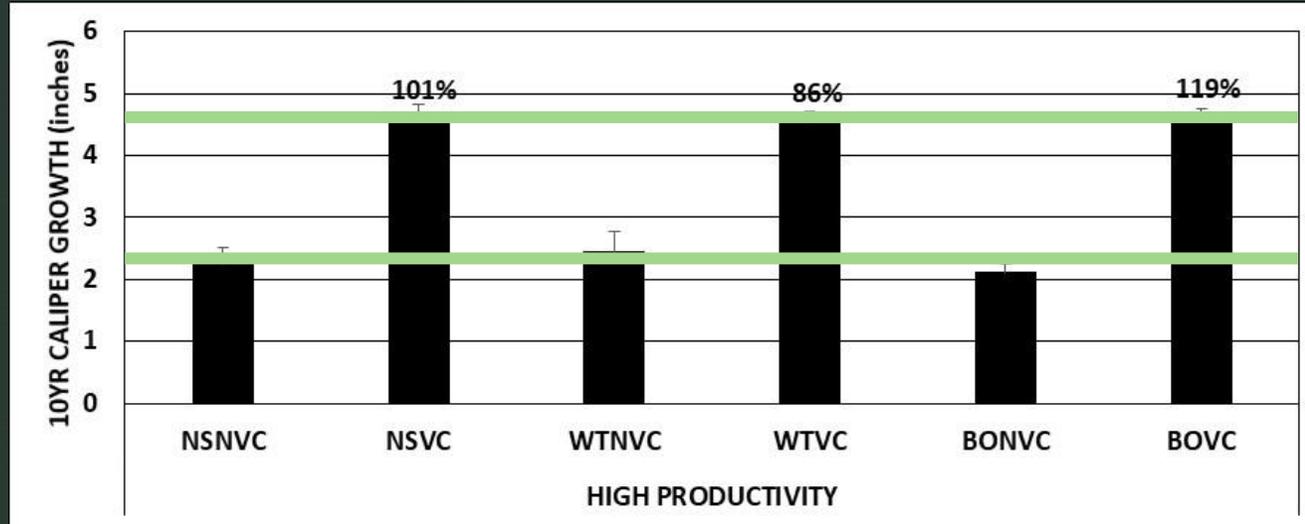
5YR Caliper and Height Growth by Harvest and Productivity Type (VC x PM x Productivity Type)



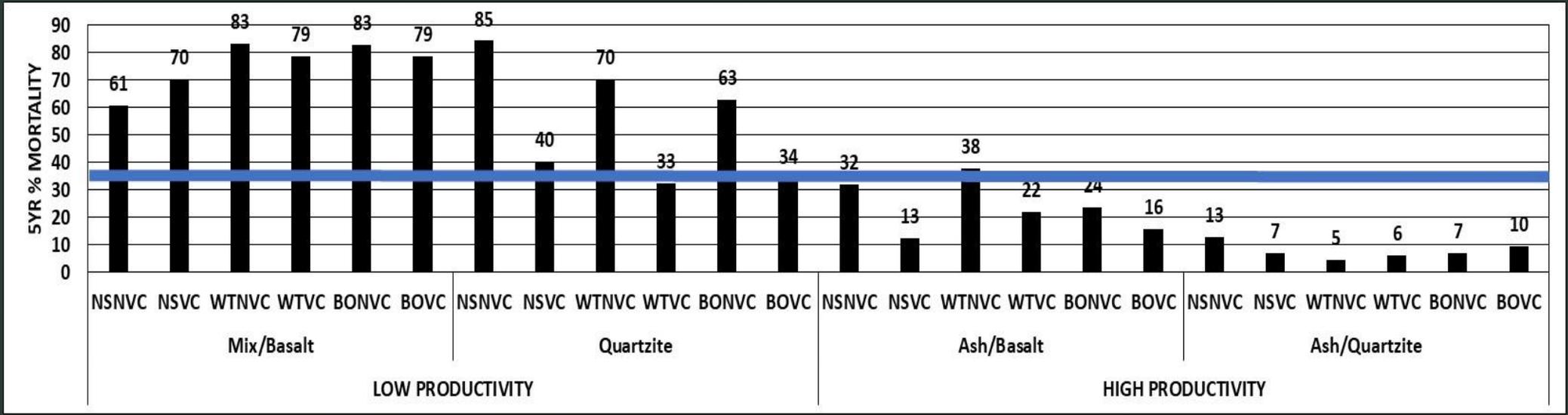
10YR Caliper and Height Growth by Harvest Type at Canus



10YR Caliper and Height Growth by Harvest Type at Canus



5YR Mortality by Harvest and Productivity Type



5YR Mortality by Harvest and Productivity Type (Treatment x Vegetation Control)

