

## **Sequencing depth and genotype quality: Accuracy and breeding operation considerations for genomic selection applications in autopolyploid crops**

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**Online Resource 5:** Segregation classes and marker frequency per class in hexaploid sweetpotato



## Expected segregation ratios in hexaploid

```
#####  
#####
```

#Filter for segregation distortion at unmethylated loci

```
#####
```

# Simplex x other configuration

```
# 000001 x 000000    -> 000000  000001                -> 1:1  
# 000001 x 000001    -> 000000  000001 000011          -> 1:2:1  
# 000001 x 000011    -> 000000  000001 000011 000111    -> 1:4:4:1  
# 000001 x 000111    -> 000000  000001 000011 000111 001111  -> 1:10:10:10:1  
# 000001 x 001111    -> 000001  000011 000111 001111    -> 1:4:4:1  
# 000001 x 011111    -> 000011  000111 001111          -> 1:2:1  
# 000001 x 111111    -> 000111  001111                -> 1:1
```

#

# Duplex x other configuration

```
# 000011 x 000000    -> 000000  000001 000011          -> 1:3:1  
# 000011 x 000011    -> 000000  000001 000011 000111 001111  -> 1:6:11:6:1  
# 000011 x 000111    -> 000000  000001 000011 000111 001111 011111  -> 1:12:37:37:12:1  
# 000011 x 001111    -> 000001  000011 000111 001111 011111    -> 1:6:11:6:1  
# 000011 x 011111    -> 000011  000111 001111 011111          -> 1:4:4:1  
# 000011 x 111111    -> 000111  001111 011111                -> 1:3:1
```

#

# Triplex x other configuration

# 000111 x 000000 -> 000000 000001 000011 000111 -> 1:9:9:1  
# 000111 x 000111 -> 000000 000001 000011 000111 001111 011111 111111 -> 1:18:99:164:99:18:1  
# 000111 x 001111 -> 000001 000011 000111 001111 011111 111111 -> 1:12:37:37:12:1  
# 000111 x 011111 -> 000011 000111 001111 011111 111111 -> 1:9:18:9:1  
# 000111 x 111111 -> 000111 001111 011111 111111 -> 1:9:9:1

#

# Quadruplex x other configuration

# 001111 x 000000 -> 000001 000011 000111 -> 1:3:1  
# 001111 x 001111 -> 000011 000111 001111 011111 111111 -> 1:6:11:6:1  
# 001111 x 011111 -> 000111 001111 011111 111111 -> 1:4:4:1  
# 001111 x 111111 -> 001111 011111 111111 -> 1:3:1

#

# Pentaplex x other configuration

# 011111 x 000000 -> 000011 000111 -> 1:1  
# 011111 x 011111 -> 001111 011111 111111 -> 1:2:1  
# 011111 x 111111 -> 011111 111111 -> 1:1

#

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