

# Tetrad Analysis II

## Recombination Events Involving Only Strands 2 & 3

non - recombinant	A B D	<u>I</u>
	A B D	A B D 1
	a b d	A B D 1
	a b d	a b d 2
single recombinations	A B D	<u>II</u>
	A b d	A B D 1
	a B D	A b d 3
	a b d	a B D 4
2 - strand double recombination	A B D	<u>III</u>
	A b d	A B D 1
	a B D	A b d 5
	a b d	a B D 6
2 - strand double recombination	A B D	<u>IV</u>
	A b d	A B D 1
	a B d	A b d 7
	a b d	a B d 8
2 - strand double recombination	A B D	<u>IV</u>
	A b D	A B D 1
	a B D	A b D 7
	a b d	a B D 8

## Recombination Events Involving All Four Strands

3 - strand double recombination	A B D	<u>V</u>
	A b D	A B d 5
	a B D	A b D 7
	a b d	a B D 3
3 - strand double recombination	A B D	<u>VI</u>
	A b d	A B D 1
	a B d	A b d 4
	a b D	a B d 8
4 - strand double recombination	A B D	<u>VII</u>
	A b d	A B d 5
	a B D	A b d 4
	a b d	a B D 3
4 - strand double recombination	A B D	<u>VII</u>
	A b D	A B d 5
	a B d	A b d 4
	a b D	a B D 3

### Eight Possible Ascospores

ABD = 1  
 abd = 2  
 aBD = 3  
 Abd = 4  
 ABd = 5  
 abD = 6  
 AbD = 7  
 aBd = 8

### Seven Possible Tetrads

I	II	III	IV	V	VI	VII
1	1	1	1	5	1	5
1	3	5	7	7	4	4
2	4	6	8	3	8	3
2	2	2	2	2	6	6

### Tetrad Analysis

	A - B	B - D	A - D
I	PD	PD	PD
II	T	PD	T
III	PD	T	T
IV	T	T	PD
V	T	T	T
VI	T	T	T
VII	T	T	NPD