

Theoretical Randomizations



- ☐ **Under the null hypothesis**
 - ☐ 1 arrangement would have assigned treatment to the 4 most fertile strips (per pair) (1/16)
 - ☐ 4 arrangements would have assigned treatment to 3 of the most fertile strips (per pair) (3/16)
 - ☐ 6 arrangements would have assigned treatment to 2 of the most fertile strips (per pair) (6/16)
 - ☐ 4 arrangements would have assigned treatment to 1 of the most fertile strips (per pair) (3/16)
 - ☐ 1 arrangement would have assigned treatment to none most fertile strips (per pair) (1/16)

Theoretical Randomizations



- ☐ Under the null hypothesis
 - ☐ The most extreme result (treated yield higher on 4 of 4 pairs, or untreated yield higher on 4 of 4 pairs) could have happened in 2 out of 16 = 0.125 arrangements.
 - ☐ The next most extreme result (treated yield higher on 3 of 4 pairs, or untreated yield higher on 3 of 4 pairs) could have happened in 8 out of 16 arrangements; only 6 of 16 would have been less extreme ($p = 1 - 6/16 = 0.625$)