

Sample Size Calculations/Reasoning

Planning Value (Assumed S_L)

Trait	S_L	
T	0.50	(VanEnglesdorp, Otis, 2001)
C	0.32	(VanEnglesdorp, Otis, 2001)
H	1.75	(Sun Apiaries, USDA, 2017)
B _{T1}	1.20	Early Spring
B _{T2}	1.20	Peak Nectar Flow
B _{T3}	8.3	Summer
B _{T4}	5.0	Fall
M	5.56	(2% threshold, 6 mites per 300 bees)

Sample Size, n

Trait	n
T	11.74141
C	11.87598
H	11.7649
B	11.96346
M	11.88434

Chosen confidence
interval ($z_{\alpha/2}$) =

Margin of Error (Assumed for each trait)

Trait	E	% of PV
T	0.143	28.6%
C	0.091	28.4%
H	0.500	28.6%
B	0.340	28.3%
M	1.580	28.4%

n = the minimum number of colonies in each line

95% 1.96