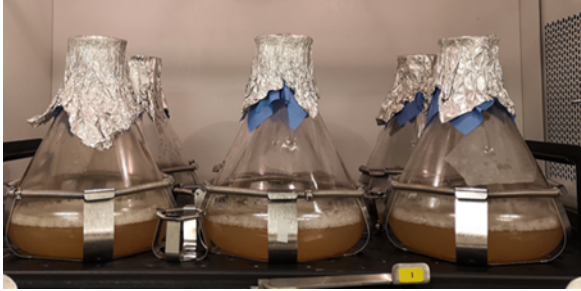


A. Growth of Sf9 insect cells and protein production in 2.8L Nalgene Fernbach Culture Flask

Low throughput with high air space

0.8L x 6 flask = 4.8L, 28% of fill volume



2.5 x higher throughput with a high-fill volume

2L x 6 flask = 12L, 72% of fill volume



B. Growth of Sf9 insect cells and protein production in 2.5 Tunair shake flasks and 5L reagent bottles

2L x 9 bottles = 18L, 80% of fill volume



4L x 6 bottles = 24L, 80% of fill volume



Figure 6