All remarks apply with equal cogency to bacteria.

[7/45]

The second phase of this work concerns the investigation of the metabolism of Neurospora. Classical techniques or those discussed above can be used in this work.

The range of problems is many.

Thus are those in which no special use is made of the existence of mutant types. The protein content of Neurospora is high (as indicated by a lysine value of 2½% on the whole mycelium, "Doermann '45") and reproducible samples containing a gram or more of nitrogen are easily obtained on well-defined, synthetic media. The isotope exchange studies on growing and on resting cultures can easily be reproduced on this material. As material for the study of growth, Neurospora has already yielded a noteworthy publication (Ryan '44) on its relation to the C_4 cycle + respiration. The compounds that have been found to be required by Neurospora are in each instance* important metabolites of higher animals — amino acids, B-vitamins, choline, etc.

* possible exception of PAB, inositol