

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF BACTERIOLOGY
BERKELEY 4, CALIFORNIA

Nov. 30, 1950

Dear Joshua -

Re tested liquid medium: I regret that we have no personal experience, since the sort of problem you're interested in has never arisen. However, Seymour Hutner (who has chided me for the inadequacy of our synthetic media) recommends (Proc. Am. Phil. Soc. 94, 152, 1950):

| | | | |
|--|--------------|----|--------------|
| Ethylenediamine tetraacetic acid | 0.05 g. | | |
| K_2HPO_4 | 0.02 g. | | |
| $MgSO_4 \cdot 7H_2O$ | 0.08 g. | | |
| NH_4Cl (NH_4NO_3 preferable, I think) | 0.02 g. | | |
| Zn | 5.0 $\mu g.$ | Fe | 1.0 $\mu g.$ |
| Ca | 2.0 $\mu g.$ | Mo | 0.6 $\mu g.$ |
| B | 2.0 $\mu g.$ | Cu | 0.4 $\mu g.$ |
| Mn | 1.4 $\mu g.$ | Co | 0.4 $\mu g.$ |

I would recommend
in pH: 7.5,
precipitation is not a
problem

To pH 6.6-6.9 \pm KOH: dist. H_2O to 100 ml.
He says this gives abundant growth, with a suitable C-source, of many strains that grow badly in the sort of crude media we use.

No chance of a paper on UV/adaptation at the moment, as I am up to my ears in tryptophane metabolism with Hayaishi, who leaves for Kornberg's lab in January. Also, I want to see what Grise has in press on UV/adaptation in yeast; he may have anticipated most of our points. Shirley Gunter has been using it to study the sequence of adaptation in metabolic pathways, with dull & expected results; the intermediates are adapted to at much the same rate as the primary substrate. All this shows is that v. small amounts of substrate are needed to start induction.

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notably tryptophan oxidase, are completely wrecked by stoppy drying et al. Alumina grinding is quick, easy & miraculous - see description in J. Gen. Microbiol. 1948.

Did I write to you about the possibility of a visit to Madison in Feb? I'd like to come after the program committee meeting of the SAG in Iowa City. It would help if you could dip up a small honorarium for a seminar, but this would be vital unless I'm broken than I expect to be by then.

Best wishes

Ray