

esculentum) contain a new carotenoid, polycopene, $C_{40}H_{56}$, which on treatment with iodine is rapidly converted into a pigment mixture in which lycopene, the red pigment of the ordinary tomato fruit, predominates. Whereas lycopene possesses the trans configuration throughout, all or most of the double bonds which are available for stereochemical changes are present in their cis form in polycopene.

Assuming that representatives of the new class of carotenoids are wide-spread in nature, even though their quantity may be small, we tested a series of plant materials in this respect. It was found that a new carotenoid occurs in some palm fruits, viz., *Butia eriopatha* and *B. capitata* (Becc.). It can be crystallized and shows in petroleum ether absorption maxima at 462 and 432.5 m μ . On addition of some iodine to the solution contained in a spectroscopic cell, the typical three-banded spectrum of γ -carotene appears almost immediately. The maxima are now at

493.5, 461 and 431 m μ . They have somewhat shorter wave-lengths than pure γ -carotene (495, 461.5 and 433.5 m μ) due to the presence of subsidiary stereoisomers. The new pigment has been termed *pro- γ -carotene*. In *B. capitata* it is accompanied by polycopene from which it can easily be separated on the chromatographic column.

The fruits of *Pyracantha angustifolia* (Schneid.) contain pro- γ -carotene and at least two different polycopenes.

Further experiments now in progress in this laboratory may reveal other examples of the occurrence of such carotenoids which are stereochemically different from representatives of the well-known all-trans series.

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LETTER FROM DOUGLAS COCKERELL, LETCHWORTH, ENGLAND, OCTOBER 1, TO HIS BROTHER IN COLORADO

THE three-day meeting of the British Association in London has been a notable event. A. Huxley describes it as being the most important scientific meeting ever held. A lot of wise things were said by important people bearing on the function of science in the reconstruction after the war. A sort of "Atlantic charter" for science was promulgated, emphasizing the unity of science throughout the world in spite of racial and political divisions. It was stated that now for the first time we had a provisional standard of the minimum requirement in food to produce the maximum health, and that some three fifths of the people of the world were living below this standard, so we had a very definite aim in front of us. Altogether, as might have been expected from a body of scientists drawn from all over the world, a larger view of world problems was taken than we have had from our politicians.

I have been reading an account of a fanatical sect that existed in the midlands in the early part of the nineteenth century. They were convinced that the end of the world was imminent, and so took no consideration for the future, living from hand to mouth from day to day.

I notice a somewhat similar state of mind developing in connection with the war conditions. The future is so uncertain. I don't think that there is any fear of the country being conquered, but there is great uncertainty about what the conditions will be after the war, particularly about the value of money. People

generally are, I think, in a mood to face and accept great changes if these are ably advocated; wise leadership is what is wanted, and the British Association meeting, by lifting the world problems out of narrow nationalistic grooves, may have a far-reaching effect on world opinion. Anyway it seems to have set a standard to be aimed at, and the political and diplomatic people appeared to agree with the suggestions put forward. The churches, too, are stirring, and taking a much wider view, and there is a marked revival of religious feeling, and a groping for some sort of guidance quite beyond the dogmas of the different sects.

Something great may come out of all this, but at present all seems to be in solution, and what will precipitate out we can not tell.

In the meantime we live on from day to day, not unhappily, but in a fog of uncertainty about the future.

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POST-GRADUATE COURSE IN TROPICAL MEDICINE AT TULANE UNIVERSITY, 1941-1942

DURING the first half of the academic year 1941-1942 a comprehensive post-graduate course in tropical medicine has been conducted at Tulane University under the auspices of the department of graduate medicine. There are seventeen enrollees, including nine from Latin-America, seven from the United States and one from Canada. Of the Latin-American group two are from Brazil, one from Chile, one from Colombia,