

# \*COCONUT YIELDS AND ENVIRONMENT

## A SUMMARY

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An important point not mentioned in the previous article on 'Rainfall and Crops' is the seasonal variation of crops throughout the year. Though 12 bunches are provided per annum (i.e. once a month) it is the usual practice to pick bi-monthly (i.e. once in two months), and it is well known that the yield for each pick varies considerably, e.g. the so-called 'Wesak' pick or 'the May' pick is always the heaviest of the 6 picks, and the 'December' pick or the last pick of the year the lowest. As a rough estimate the total yield for the year is  $4\frac{1}{2}$  times the May pick or 8 times the 'December' pick.

On the other hand as a rule in most coconut districts the heaviest rainfall is during November-December during the North-East Monsoon : but the corresponding pick of the following year is (i.e. the 6<sup>th</sup> pick of the next year) is nevertheless smallest of the 6 picks. As a rule the ratio of yield during May-June 'Wesak' pick/November-December pick is  $\frac{4\frac{1}{2}}{8} = \frac{9}{16}$  or approximately  $= \frac{3}{5}$ .

Of the factors rainfall, temperature, sunlight, manuring, cultivation which cumulatively effect yield, it is now accepted by crop physiologists **that the day length has the preponderant effect on yield of most crops**, e.g. paddy and other cereals and most annual crops.

It is well known that under Ceylon conditions the longest day length corresponds to the period of the big picks—April-May-June, and it is tentatively offered as an explanation of the highest yield occurring in April-May-June that **the dominant influence of the day length over other factors is a most likely explanation for this phenomenon.**

It would be of interest to examine this seasonal (within the year) phenomenon on the crop yields in the parts of the world where the day length is different, depending on the distance from the equator, e.g. Islands of the South Pacific such as Tonga and Solomon Islands, and Islands in the North Pacific such as the Trust territories of Micronesia.

## References

White, R. O.: Crop Production and Environment, Faber and Faber.

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\*A comprehensive series of articles on various aspects of the influence of the numerous environmental factors and their interaction on yield of coconuts will appear in the subsequent numbers of the Ceylon Coconut Journal. (Editor, C.C.Q.).