

### PHOSPHORUS OXYCHLORIDE, A NEW CONDENSING AGENT FOR THE CHALKONE FORMATION

THE chalkones which serve as useful starting materials for the syntheses of flavones and related compounds, are usually prepared by condensing aromatic ketones with aldehydes in presence of a suitable agent such as hydrochloric acid<sup>1</sup> or alkali.<sup>2</sup>

In connection with our work on chalkones we observed that phosphorous oxychloride smoothly effected the condensation of acetophenone with benzaldehyde; the benzylidene acetophenone was obtained in good yields.

As this agent was not used before for this purpose, its applicability was investigated in several cases. It has been found that chalkones are formed in good yields from acetophenone, *o*- and *p*-hydroxy and *m*-nitro-acetophenones, using several aldehydes.

The general procedure is to add a few drops of the reagent to the mixture of aldehyde and ketone in equimolecular proportions. The reaction mixture after keeping overnight is decomposed with cold water and the separated chalkone is identified by a mixed melting point with a known sample.

The full details of this work will be published elsewhere.

M. R. Science Institute,  
Gujarat College,  
Ahmedabad,

G. N. VYAS.  
N. M. SHAH.

December 17, 1948.

1. Claisen, L., and Claparede, *Ber.*, 1881, **14**, 2463.; Russel, A., and Clark, S. F., *J. Amer. Chem. Soc.*, 1939, **61**, 2655. 2. Claisen, L. and Ponder, A. C., *Annalen*, 1884, **223**, 137. For full references and work on Chalkones by Kostanecki, *vide Ber.*, 1912, **45**, 1701. Mahal, Rai and Venkatraman, *J. C. S.*, 1935, 866. Wheeler, *et al.*, *J. C. S.*, 1937-38, 1320, *et. seq.* Seshadri, *et al.*, *Proc. Ind. Acad. Sci.*, 1947, **26A**, 189.

### ON THE FOOD OF THE GOONCH BAGARIUS BAGARIUS (HAM.)

THE Goonch is one of the largest siluroids occurring in the major rivers, into the upper reaches of which it migrates for spawning during the monsoons.<sup>1</sup> Its voracious and piscivorous habit is well known; and its teeth, thickwalled baggy stomach and intestines testify this.<sup>2</sup> Beavan<sup>3</sup> has observed this fish feeding on the Spiny Eel, *Mastacembalus armatus* and on the Herring, *Clupea chapra*. Chacko and Job<sup>4</sup> have recorded young prawns, fish remains and sand in the stomach of the young stages of the species. Analysis of the gut contents of over 100 adult specimens by me has revealed that 14 species of fishes, 2 of crustacea, and 2 of algæ, listed below, constitute the food of this species.

(1) *Labeo fimbriatus*, (2) *Cirrhina ful-ungee*, (3) *Osteochilus thomassi*, (4) *Catla catla*, (5) *Amblypharyngodon mola*, (6) *Barbus sophore*, (7) *Barbus stigma*, (8) *Nuria danrica*. (9) *Rasbora daniconius*, (10) *Barilius bendelisis*, (11) *Danio æquippinnatus*, (12) *Chela argentea*, (13) *Chelaphulo*, (14) *Macrones vittatus*, (15) *Palæmon malcolmsonii*, (16) *Palæmon scabriculus*, (17) *Spirogyra* and (18) *Cladophora*.

The marked piscivorous tendency of the Goonch may have an adverse effect on the other fluvial fisheries.

I am indebted to Mr. P. I. Chacko, Asst. Director of Fisheries, Madras, for his guidance and help during the investigation, and to the Director of Industries and Commerce, Madras, for according necessary permission for the publication of the note.

Inland Fisheries Office, G. K. KURIYAN.

8, Ormes Road, Kilpauk,  
Madras,

September 1948.

1. Chacko, P. I., *Curr. Sci.*, 1947, **16**, 289-90. 2. Hora, S. L., *J. Bombay Nat. Hist. Soc.*, 1939, **40**, 583-93. 3. Beavan, R., *Freshwater Fishes of India*, London, 1897. 4. Chacko, P. I., and Job, S. V., *Proc. 35th Indian Sci. Cong.*, 1948, **3**, 204.