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THE BIOSYNTHESIS OF GALACTOLIFIDS IN PHOTOSYNTHETIC TISSUE

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the requirements for the degree of
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ABBREVIATIONS

ACP	-	acyl carrier protein
AES	-	automatic external standard
ATP	-	adenosine 5' - triphosphate
BSA	-	bovine serum albumin
C	-	Curie
C/M	-	chloroform - methanol solution
CMU	-	3-(p-chlorophenyl) - 1:1-dimethyl urea
CoA	-	coenzyme A
cpm	-	counts per minute
DCMU	-	3-(3:4-dichlorophenyl) - 1:1-dimethyl urea
DCPIP	-	2,6-dichlorophenolindophenol
DEGS	-	diethylene glycol succinate
DGDG	-	digalactosyl diglyceride
dpm	-	disintegrations per minute
FRS	-	ferredoxin reducing substance
g.	-	gram
GLC	-	gas liquid chromatography
GSH	-	L-glutathione
IUPAC-IUB	-	International Union of Pure and Applied Chemistry - the International Union of Biochemistry
l.	-	litre
M	-	molarity
MGDG	-	monogalactosyl diglyceride
NADP	-	nicotinamide adenine dinucleotide phosphate
p.	-	page
PC	-	phosphatidyl choline
PCMB	-	p-chloromercuribenzoic acid
PE	-	phosphatidyl ethanolamine

PG - phosphatidyl glycerol
 PGA - 3-phosphoglyceric acid
 PI - phosphatidyl inositol
 POPOP - 1,4 bis [2- (5-phenyloxazolyl)]- benzene
 PPO - 2,5 - diphenyloxazole
 PS I, II - photosystem I, II
rac - racemo
sn - stereospecific numbering
 SQDG - sulphoquinovosyl diglyceride
 TCPIP - 2,3', 6 - trichlorophenolindophenol
 TGDG - trigalactosyl diglyceride
 TLC - thin layer chromatography
 Tris - Tri - (hydroxymethyl) methylamine
 UDP-D-galactose - uridine 5' - diphosphate D-galactose
 UDFG - uridine 5' - diphosphate α -D-glucose
 v. - volume
 w., wt. - weight.

NOMENCLATURE OF LIPIDS

For the specific structural designation of complex lipids containing a glyceryl moiety, the nomenclature suggested by the IUPAC-IUB Commission on Biochemical Nomenclature (European J. Biochem (1967) 2, 127) has been followed. However, although a diglyceride prepared by chemical synthesis is correctly named as, e.g., rac-1-O-oleoyl, 2-O-linoleoyl glycerol, it is referred to as, in this case, 1-oleoyl, 2-linoleoyl glycerol, for sake of brevity. As a group the synthetic diglycerides are designated 1,2 (2,3)-diglycerides. The trivial names of complex lipids are used when it is more appropriate to do so e.g. phosphatidyl choline.

Fatty acids are designated by the shorthand notation of number of carbon atom : number of double bonds, e.g. 16:3 refers to hexadecatrienoic acid.