

CHAPTER IV

OCCURRENCE/
DISTRIBUTION OF
HYPERPARASITES

A critical study of literature regarding the occurrence of fungal hyperparasites reveals the facts which are represented in Table No.A. From the table, it is clear that there is a natural balance about the number of fungi serving as host to the hyperparasites i.e. about 734 fungi serve as host to about 721 hyperparasites. But the distribution of host as well as parasites amongst the different classes is typical one, which shows the phylogenetic relationship among the different groups and nutritional habits to different groups of fungi. Because the fungi are considered to have originated from green algae by loss of chlorophyll and development of parasitism. So the sporophytes are considered more primitive than parasites. And parasites are more primitive than hyperparasites.

From the table, it is clear that out of 721 hyperparasites maximum i.e. 329 are from class Deuteromycetes. Amongst 329 hyperparasites 197 are occurring on the ascomycetes hosts. Ascomycetes comes next, out of 229 hyperparasites 154 are on ascomycetous host only Phycomycetes stand third with 128 hyperparasites where 100 amongst them are on phycomycetes only, Basidiomycetes have 34 hyperparasites out of which 23 are on basidiomycetous host.

Out of 734 members of fungi serving on host 383 are from the class Ascomycetes bearing 379 from different classes. Class Basidiomycetes is represented by 153 hosts bearing 150 hyperparasites. Phycomycetes follows with 117 hosts bearing 125 hyperparasites. Last is the group Deuteromycetes where the lowest number of hosts, only 81 bearing 67 hyperparasites.

If the percentage of total number of parasites on the hosts of same class is considered, then phycomycetes have 125 parasites. Out of which 100 are on phycomycetes host. So about 80% phycomycetes hyperparasites occur on phycomycetes hosts. This percentage goes on decreasing when we go to Basidiomycetes 65.71 %. Ascomycetes of about 64.62 % while in case of Deuteromycetes it is only 14.89 %.

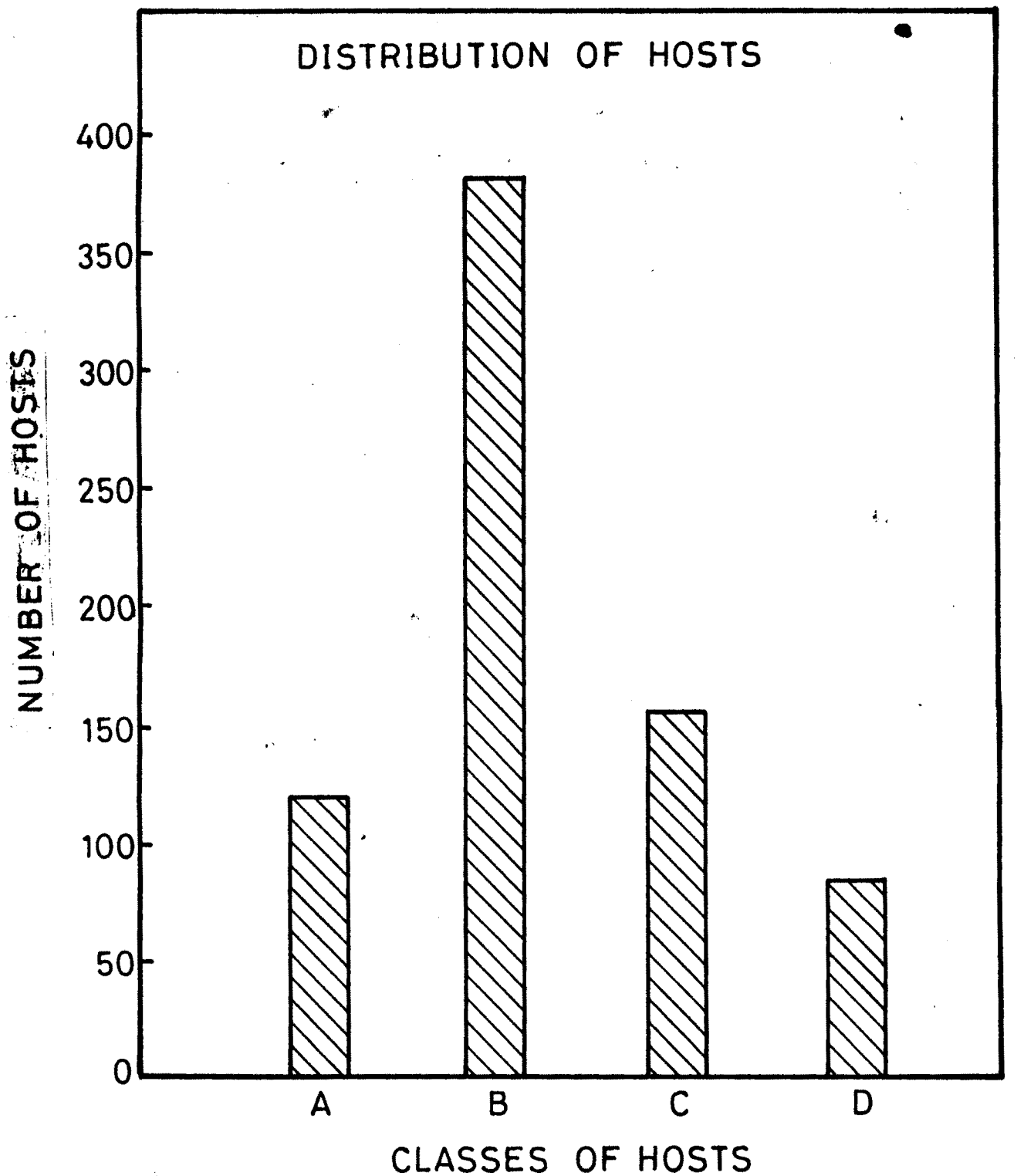
Ascomycetes, Basidiomycetes and Phycomycetes have 383, 153, 117 host members serving as 229, 35, 128 hyperparasites.

Thus, they are showing presence of primitive and higher forms in each group. So the polyphylatic origin of fungi in different lines independents from different groups of genera and red algae is supported by this observation.

TABLE No. A - Occurrence/Distribution of Hyperparasites

H o s t		Class of parasite with numbers				
Class of Host	No.of Host	Phyco- mycetes	Asco- mycetes	Basidio- mycetes	Deutero- mycetes	Total
Phycomycetes	117	100	6	-	19	125
Ascomycetes	383	7	154	10	197	379
Basidiomycetes	153	14	49	23	64	150
Deuteromycetes	81	6	10	2	49	67
TOTAL	734	128	229	35	329	721

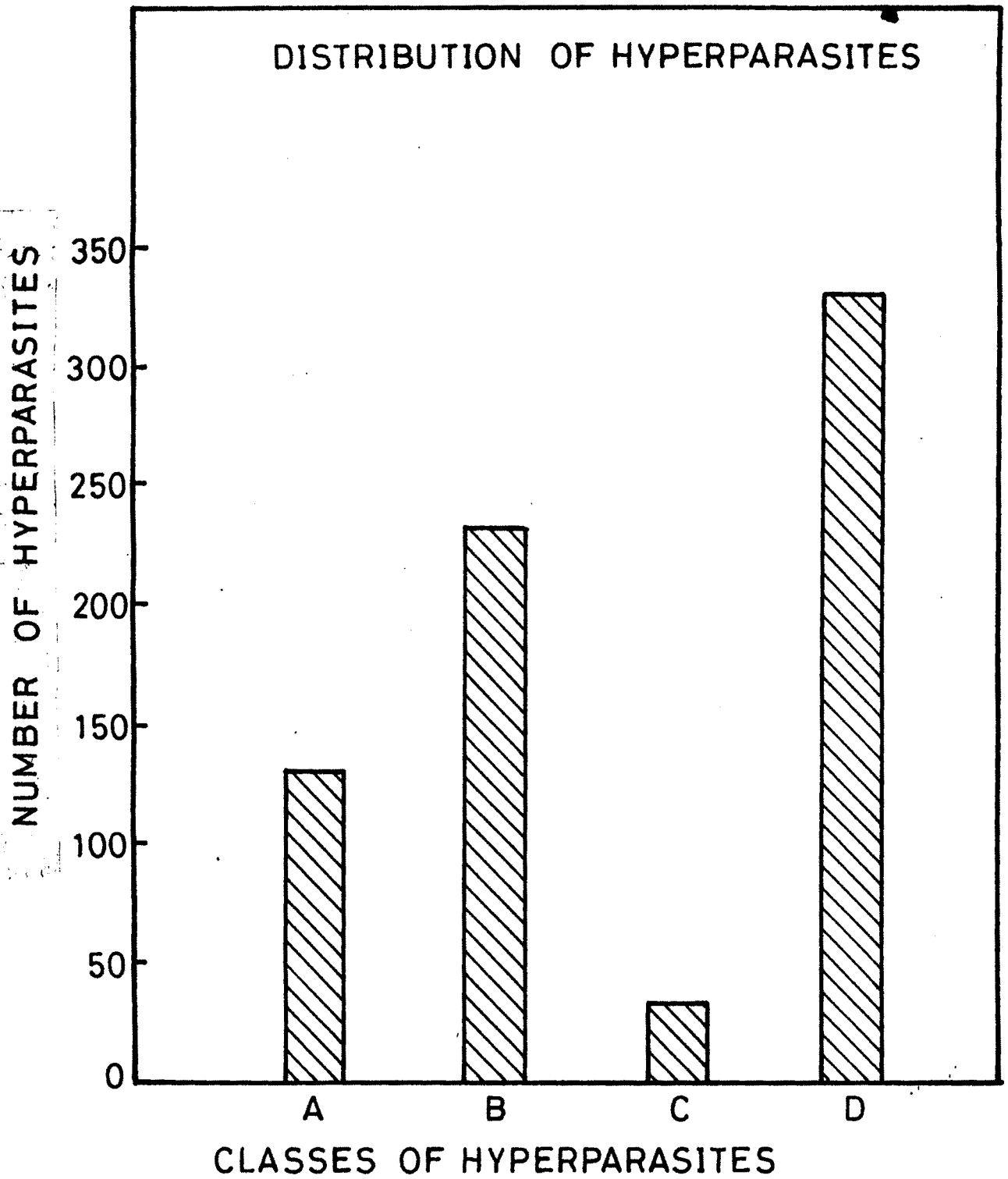
FIGURE A



A - PHYCOMYCETES
B - ASCOMYCETES

C - BASIDIOMYCETES
D - DEUTEROMYCETES

FIGURE B



A - PHYCOMYCETES

B - ASCOMYCETES

C - BASIDIOMYCETES

D - DEUTEROMYCETES