Species	2n	Author
	$x=9$	
C. alpinum L.	72	Böcher, 1938; A. and D. Löve, 1944; Sörensen and Westergaard, 1948; Brett 1950 (Britain).
	108	Sörensen and Westergaard, 1948 (Greenland); Brett, 1950
	c. 144	Brett, 1951
C. arvense L.	72	Rohweder, 1939; Mattick, 1949; Söllner, 1950; Brett, 1951 (Britain)
	36	Söllner, 1950; Brett (Canada)
	38	Brett, 1950
C. banaticum (Roch) Heuff	72	Söllner, 1950
C. brachypetalum Pers.	*c.* 52	Mattick, 1949
	90	Hagerup, 1944; Brett (Britain)
C. cerastoides Britton	36	Mattick, 1949
	38	Favarger and Söllner, 1949
	40	Böcher, 1938; Sörensen and Westergaard, 1948
C. candidissimum Correns	36	Rohweder, 1939
C. fontanum Baumg.	*c.* 120	Mattick, 1949
	c. 144	Böcher, 1938
C. glomeratum Thuil.	72	Rohweder, 1939; Brett, 1951 (Britain)
C. glutinosum Fries.	72	Hagerup, 1944
C. holosteoides Fries. (*C. vulgatum* L.)	*c.* 111	Heitz, 1926
	126	Hagerup, 1944
	136	Brett, 1950 (Britain)
	144	Rohweder, 1939; Mattick, 1944
	136–152	Brett (Britain)
C. latifolium L.	36	Mattick, 1949; Favarger and Söllner, 1949
C. pedunculatum Gaud.	36	Favarger and Söllner, 1949
C. regelli Ostf.	72	Flovick, 1940
C. semidecandrum L.	36	Rohweder, 1939; Brett (Britain)
C. tetrandrum Curt.	36	Wullf, 1937; Rohweder, 1939
	72	Brett (Britain)
C. subtetrandrum (Lange) Murb.	72	Hagerup, 1941
C. tomentosum L.	38	Rohweder, 1939
	72	Brett, 1951
C. uniflorum Clairv.	36	Mattick, 1949; Favarger and Söllner, 1949
	$x=19$	
C. anomalum Waldst. and Kit.	38	Favarger and Söllner, 1949; Brett
C. chloraefolium Fisch. and Mey	38	Rohweder, 1939; Söllner, 1950; Brett
C. dahuricum Fisch.	38	Söllner, 1950; Brett
C. dichotomum L.	38	Brett, 1951
C. maximum	38	Brett (Alaska)
C. perfoliatum L.	38	Brett, 1950; Söllner, 1950

Strephodon species *C. perfoliatum*. It would also appear, as Söllner[2] has already suggested, that the Dichodon species *C. anomalum* is related to *C. perfoliatum* and, in my opinion, to *C. dichotomum* also. Further investigation it is hoped will result in a more natural classification than that formulated by Seringe and published originally by de Candolle[3].

Other counts in these lists call for comment. Three species, *C. cerastoides*, *C. arvense* and *C. tomentosum*, appear to have both basic numbers. The morphological and geographical evidence would suggest that they belong to the $x = 9$ group and possibly, therefore, the 38 and 40 chromosome members are aneuploids, $4x + 2$ and $4x + 4$.

The species *C. holosteoides* (*C. vulgatum*) is peculiar in that its chromosome number is not constant even for the offspring of the same plant after selfing. This species is a very high polyploid, probably 16-ploid, and it would seem that, at this degree of ploidy, loss or gain of a few chromosomes at meiosis has little if any effect upon the viability and fertility of the seed. The range of chromosome numbers given as 136–152 is probably wider than this, as approximate counts have been made which indicated even lower and higher numbers. Many multivalents are found at first metaphase, and it is thought that different numbers pass to the poles at first anaphase. Lagging chromosomes, though found, are by no means the rule, and usually all the chromosomes are included in one of the four nuclei at the end of meiosis.

The question of the origin of these two basic numbers remains. It is possible that their origins are quite distinct; but, alternatively, it could be that as a result of hybridization the plants with 38 chromosomes have the activity of all but two of their nucleolar-organizing chromosomes suppressed, the situation being similar to that discovered by Nevashin[4] in *Crepis*.

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Colonization of Plant Debris by *Coprinus* Species in Soils

Isolation of members of the group Basidiomycetes, as compared with other soil fungi, directly from soil by either the soil dilution plate[1] or the root burial technique[2] has met with little success, though better results have been obtained by the soil plate technique[3]. Hitherto, studies on their distribution were mostly confined to the recording of fructifications (which may be of seasonal occurrence) in Nature[4]. However, in the course of investigations in this laboratory on survival of *Macrophomina phaseoli* by the root burial technique in Madras garden soil amended with ammonia at different concentrations (2, 5 and 10 per cent), it was observed that a Basidiomycete regularly colonized and produced fructifications on pieces of cotton root when plated on agar media (potato-dextrose and Horne and Mitters's media). The incubation period needed in the soil for this colonization was only two weeks. The control pieces of root buried in untreated soil failed to yield the fungus. This work was extended to cotton-growing soils, namely, Coimbatore, Udamalpet and Kovilpatti soils (Madras State). In all cases similar fructifications were observed only in the soils treated with ammonia. This Basidiomycete was also found to colonize and produce its fructifications on pieces of root soaked in 50 per cent ammonia solution for one hour and incubated for one week in the above-mentioned soils. The fungus has been identified as a species of *Coprinus*.

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