

REVIEWS AND COMMENTS

An Index to the Best in Periodical Apicultural Literature

"BRITISH BEE JOURNAL"

The Ancestors of the Bee

In the B.B.J. Mr. D. Wilson computes the number of ancestors of an animal at the tenth step backwards to amount to 1024, or 512 male and 512 female. He says regarding the ancestry of the bee:

A different state of things altogether presents itself when the pedigree of a bee is traced back. Assuming the theory that a drone has no male parent, the following will show the ancestry of a worker or queen-bee to ten generations.

It is most surprising the way the number of missing ancestors mounts up. Until I worked out this little table I had not the least idea that it would amount to so many at the tenth generation back.

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Queen	1	2	3	5	8	13	21	34	55	89
Drone	1	1	2	3	5	8	13	21	34	55
Missing	0	1	3	8	19	43	94	201	423	880
Total ancestors for ordinary animal	2	4	8	16	32	64	128	256	512	1024

AMERICAN BEE JOURNAL

Best Bees to Resist Foul Brood

It is generally believed in America that the Italian Bee exhibits a greater degree of immunity to disease than does the black. It is also generally accepted as being beyond doubt that a strong, active, and vigorous colony will more easily resist an attack of foul brood than a weak one. Strong and widely spread as the idea undoubtedly is, yet there are some Thomases that doubt such statements. An editorial in the A.B.J. containing comment on Mr. McEvoy's recent remarks in our pages about the Italian bee voices the opinion that is current among the best bee-keepers of

For my own amusement, I have worked this out to twenty steps, and find that whereas the ordinary animal has 1,052,672 ancestors, half male and half female, the worker or queen-bee has but 17,711, of which 10,946 are female and 6,765 are male, while there is the enormous number of 1,034,961 ancestors missing.

The numbers in the pedigree of a drone are slightly different, there being as many ancestors in the tenth generation as in the ninth of a queen or worker and so on.

It will be seen that the reason for this enormous difference in the number of ancestors between the bee and the ordinary animal is that the ancestry of the bee mounts up by addition, whilst that of the animal mounts up by involution of the number two.

this continent. Mr. York writes as follows:

Mr. McEvoy's answer is good. No breed of bees is immune to foul brood, but some will resist better than others; and the colony that is most vigorous in gathering stores will use the same vigor in resisting disease. We can not measure directly the disease-resisting strength of each colony, but we can measure the storing strength and be guided thereby.

The editor of the "American" is thus evidently of the opinion that the "storing strength" of a colony is in a measure proportionate to its ability to resist disease.

He continues:

"But it may be asked, 'Why does Mr. McEvoy put the word 'Italian' at all in his answer? Will not the bees which store the most honey be the best to re-

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sist disease, whether low bands or not? Italians are not blacks are not of the best colony of blacks against the poorest that can be found, no doubt store more and equally they will ing disease. Italians because they are ye they are vigorous."

It would be well if fraternity if this were Most probably not.

to be acquired only severe process of elimination strains that are least the attacks of noxious know that the people developed an ability to an astounding degree.

in a scientific contemporary the Chinese can use co from canals without in that very little typhoid them, and that small-pox ease, to be likened to t

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It needs no explanation to a characteristic is peculiar

than to individuals, and be surprised if adequate

conducted experiment sho the same should likewise

case of the bee.

Out-Door Wintering

What seems a good plan wintering is given by Isa hast as follows, who writes:

In our climate we usually every month in winter wh and pleasant enough for the a good flight, and my ex shown that they keep in and suffer less from "spring months as they frequently