

NEBULA CLUSTER IS SUPER UNIVERSE

What is described as a cloud of galaxies, containing more than a hundred spiral nebulae, each similar in nature to the group of stars of which the sun and all the visible stars are part, is the object under study at the Harvard College Observatory by Dr. Harlow Shapley, director of the observatory, and Miss Adelaide Ames, of the observatory staff.

So distant is this cloud of nebulae that the light from the center of it takes about ten million years to reach the earth, though travelling fast enough to go from New York to California in a seventy-fifth of a second. Its diameter is approximately one-fifth of its distance from the sun, says Dr. Shapley, so that a beam of light would take about two million years to cross it. Thus it is the largest thing known to science, and the most distant that has been measured.

The cluster is located in the neighboring constellations of Virgo and Coma Berenices, or Berenice's Hair, both of which are now visible in the western evening sky, and includes at least 103 well defined spiral nebulae. One of these is known as Messier 61, and in it two German astronomers recently discovered a nova, or new star, which flashed out from previous obscurity. The brightness of this nova was so much fainter than such novae which occur in the sun's neighborhood, that it confirmed the distance of ten million light years estimated by Dr. Shapley to be the distance of the cluster.

That these nebulae actually belong to one system is indicated by their concentration as compared with regions of the sky nearby where the nebulae are much scarcer. Of the 103 in the group, says Dr. Shapley, two-thirds are within 5 degrees, or ten times the diameter of the moon, of the center, while thirty-seven are within three degrees of the center.

That the spiral nebulae, of which many thousands are known in various parts of the sky, are stellar systems or galaxies outside the system of which the sun is a member, was shown last year by Dr. Edwin P. Hubble, of the Mt. Wilson Observatory, who measured the distances of two of the most conspicuous of them. These two were both shown to be about a million light years away, and while they are considerably smaller than our galaxy, including the Milky Way, they are very similar to it. Dr. W. W. Campbell, president of the University of California and director of the Lick Observatory, one of America's most eminent astronomers, in an address before the American Astronomical Society following the announcement of Dr. Hubble's work, said, "We do not know, I must confess, that our stellar system is now a spiral nebula, or that it is the developed product of a spiral of ages past, but it does seem to have most of the known attributes of a spiral."

Dark colored honey is generally richer in flavor than pale honey.

Moist soap rubbed on a mosquito bite will allay the irritation.
