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SEARCH FOR PECULIAR STARS IN THE REGION OF THE
ASSOCIATION CASSIOPEIA OB 14

The search for peculiar stars can provide valuable information concerning their evolutionary status. Up to now this kind of work has been mostly restricted to accidental discoveries in different regions of the sky. The point is to look for indications of a possible preference of such special objects to certain stellar groups. In this respect, more observational data are desirable about the presence of these stars in star clusters and associations.

A program, initiated by us, of objective prism spectral classification in the regions of five OB-associations (in press), gave us the opportunity to reveal a great number of new peculiar or otherwise astrophysically interesting stars. A list of 90 stars, 73 of which - new-recognised as peculiar, in the region of the associations Cygnus OB 4, Cepheus-Lacerta OB 1 and Cassiopeia OB 9, has been published earlier (Radoslavova Ts., 1978, *Astron.Tsirk.*, No.979; 5). The present list contains the results of an objective prism inspection for peculiar stars in a region of about 60 square degrees, centered at the association Cassiopeia OB 14.

The plates are taken with the 70 cm meniscus telescope of the Abastumani Astrophysical Observatory (USSR) using an 8° -objective prism. The reciprocal dispersion at $H\gamma$ is 166 \AA/mm and the spectra are widened to 0.4 mm. Each plate has a diameter of $4^{\circ}50'$, with high-quality images to the extreme edge. The exceptional seeing at Abastumani together with the purity of the spectra allows peculiar star discoveries with a great certainty (Kharadze E.K., Bartaya R.A., 1973, *IAU Symp.*, 50, 91).

The Table lists the stars suspected in peculiarity, together with their positions (1950) and magnitudes given in the Bonner Durchmusterung. The stars sufficiently bright to be listed in the HD-catalogue are designated by their HD-numbers and magnitudes. There are several stars of about 9.5 to 10 photographic magnitude which are not present in the BD; for them the approximate coordinates are indicated, as calculated by us. In the last column the observed peculiarities in the spectra are noted; the semicolon indicates weak characteristics of the type.

Table I

HD or BD	R.A.	Decl.	m	Remarks and type
-	00 ^h 04. ^m 7	63°49'	-	Ap ; λ 4128
-	00 09.4	59 47	-	Ap ; $\lambda\lambda$ 4128, 4077
962	00 11.4	60 27	7.76	A+G comp.
+63°0020	00 13.8	64 08	9.5	Am
+65°0032	00 16.4	65 53	9.2	Ap ; $\lambda\lambda$ 4128, 4077
+61°0045	00 18.2	62 30	9.4	Ap or Am ; 4128, 4070, 4030
-	00 20.4	62 24	-	Ap ; λ 4128
2032	00 22.4	62 55	8.8	Am ; SAO 11176
+63°0044	00 22.9	63 33	9.4	Ap ; λ 4128
-	00 26.6	62 31	-	Ap ; λ 4128
+64°0051	00 26.9	65 08	9.3	Ap ; λ 4128
+65°0065	00 28.0	65 52	9.2	Ap ; λ 4128
+59°0081	00 32.4	60 11	9.3	Am or FOp
+61°0126	00 32.5	62 17	9.4	Am :
+62°0154	00 43.7	63 05	8.5	Am
+61°0180	00 51.5	61 37	9.3	Ap ; λ 4128
+63°0109	00 51.8	64 16	9.3	Ap ; $\lambda\lambda$ 4128, 4077
+65°1981	23 58.3	66 22	9.2	Ap ; λ 4128

The low dispersion used did not permit us to give a more precise type of peculiarity; it is even possible some stars classified as Am to prove to be Ap, or vice versa. So, the interpretation of our discoveries is not straightforward. A higher resolution study of the objects in the list is obviously desirable, as well as information about their membership in the association, that should be acknowledged by the author.

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