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The Sulfur content and origin of the North Thrace Basin coals, Turkey

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Sulfur (S) is one of the major and hazardous components of the coal, and it may be originated from different sources depending on coal formation. The defined main sulfur types in the coal are pyritic sulfur, organic sulfur and sulfate sulfur. Thrace basin which have approximately 2 billion tons coal reserves is one of the most important coal basins of Turkey and Edirkoy (Saray-Tekirdağ) is the largest coal production site in north of Thrace basin. The obtained results show that the total S contents in the Edirköy coal samples vary from 3.21 to 14.1%. According to this result, the coal in Edirköy field is in the form of high -sulfur coal and the sulfur types analysis indicate that the ratio of pyritic sulfur vary from 0.78 to 5.25%, the organic sulfur vary from 1.1 to 7.47% and the sulfate sulfur vary from 0.54 to 1.38% in the field. It was revealed that the ratio of organic sulfur in the coal increase towards the north of the field. In this study, the sulfur content and origin of the coal in Edirköy field will be discussed with sulfur isotope data.