Introduction: Black pine is in the Pinaceae family and it is coniferous species. The family is 4 genus (Pinus, Picea, Abies, Cedrus) of species 9 and accordingly 22 taxon in Turkey. Pinus nigra J. F. Arnold subsp. pallasiana (Lamb.) Holmboe var. pallasiana is a black pine species in Turkey. The aim of the study is to investigate the relationship between Anatolian Black Pine and environmental variables. Material and Methods: In the study, 70 sample areas were taken in Yenişarbademli region. In the sample areas, the height and age of three plus trees were recorded. Environmental factors (latitude, longitude, slope, elevation, aspect, surface roughness) were recorded in the sample areas. Plus trees, the site index of the black pine tree was calculated with the help of age and height values. Relationships between the site index and the continuous environmental factors were assessment by Pearson Correlation Analysis. Relationships between site index and the categorical environmental factors were assessment by the Spearman Correlation Analysis. Spearman Correlation Analysis was applied between presence and absence data and the continuous environmental factors for the black pine distribution model. Interspecific Correlation Analysis between presence and absence data environmental factors was applied. Analyzes were performed with SPSS and PC-ORD programs. Results: In the study, 47 different woody plant species were identified in 70 sample areas. According to the results of Spearman and Pearson Correlation Analysis, LONGITUDE, ELEVATION, BIO17 variables are important. According to the results of Spearman and Interspecific Correlation Analysis, negative correlation was found with ELEVATION and BIO17 variables, and positively correlated with surface stone change. The results indicate that it has been decided to concentrate on height variable in terms of distribution and productivity of black pine. Discussion: Anatolian black pine is widely used in afforestation activities due to its wide spread in our country. It is thought that the results obtained from this study will provide valuable information in terms of species distribution models, which are especially important in ecological studies in recent years. Modeling and mapping studies on black pine species can be done later in the later stages. For this reason, this study will be the source for many studies to be carried out in the field of ecology. Acknowledgement: We would like to express our appreciation to the Süleyman Demirel University Scientific Research Project Commission, which supported this study (SDÜ-BAP 5031-YL1-17). Keywords: Pinus nigra, environmental factors, productivity, Yenişarbademli