

# *Berberis crataegina* is a host for *Puccinia graminis* f. sp. *tritici* in Sinop, Turkey

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In 2016 and 2017, 25 *Berberis* plants in Sinop province located in northern Turkey was examined for the presence of aecial infection.



Location of Sinop province of Turkey where the study carried out

The elevation of *Berberis* plants ranged between 334-543 m. The estimated number of *Berberis* plants per 100 m<sup>2</sup> ranged between 1 and 30 and the number of infected plants in 10 m ranged between 1-10. The heights of the *Berberis* plants were between 1.50 - 2.10 m.



Flowers of the *Berberis* plant



Inspection of the *Berberis* plants

Aecial infection was observed in 9 *Berberis* plants. In these plants, percentages of aecial infection varied between 2-90. No fruits were observed in one *Berberis* plant, however, other *Berberis* plants formed dark blue-black fruits. These *Berberis* plants were identified as *Berberis crataegina* based on morphological characters.



Aecia on the abaxial surface of the *Berberis* leaves



Dark blue-black colored *Berberis* fruits

From three *B. crataegina* plants, 17 single aecial pustules were obtained and inoculated on the North American differential set. Fifteen isolates were stem rust race TTTTF and 2 isolates were stem rust race TTKTF. Detailed studies are necessary for the *B. crataegina* – pathogen interaction.