

# メキシコのダイズさび病菌の病原性は2つの傾向に大別される

The pathogenicity of Asian soybean rust pathogen in Mexico can be grouped into two broad trends

ダイズさび病は深刻な大豆の病害の一つで、メキシコでもこの病害が問題となっています。抵抗性品種の開発のため、メキシコのさび病菌の病原性を調べました(図1)。その結果、主にタマウリパス州とチアパス州のさび病菌の病原性が大きく異なり、それぞれ南米と北米のものと類似していました。また、殆どの抵抗性遺伝子が効かないさび病菌もありました。これら全てのさび病菌に有効であったのは3つの抵抗性遺伝子を集積した系統でした。この系統は多種のさび病菌に有効だけでなく高い抵抗性を示すので、メキシコでの育種材料として期待されます。

Asian soybean rust (ASR) is a serious soybean disease in the world including Mexico. To develop resistant varieties, the virulence of Mexican ASR pathogen was investigated (Fig. 1). The results showed that the virulence of ASR samples mainly from the states of Tamaulipas and Chiapas differed greatly and were similar to those of South and North America, respectively. ASR samples for which most resistance genes were ineffective were also detected. On the other hand, a gene-pyramided line with three resistance genes was effective against all ASR samples. This line could be a useful breeding material in Mexico because it is not only effective against various ASR samples, but also shows high resistance.

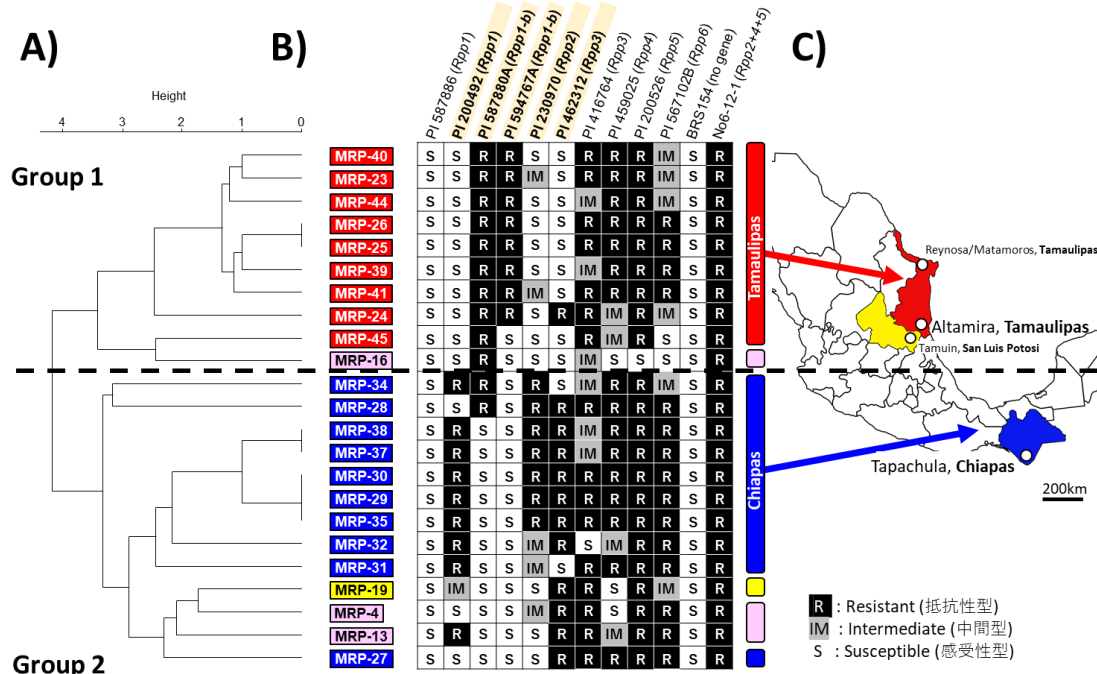


図1 メキシコのダイズさび病菌(MRP)の病原性に基づくグループ化(A)と抵抗性品種での反応(B)、採集地(C)。サンプルの色分けは採取地と年による。品種名後のカッコ内は抵抗性遺伝子(Rpp)を表す。

Fig. 1. Grouping of Asian soybean rust (MRP) in Mexico based on virulence (A), reaction of resistant varieties (B), and sampling locations (C). The color of MRP is based on the location and year of sample collection. Parentheses after the variety names indicate resistance genes (Rpp).

References: García-Rodríguez et al. (2017) *Mexican Journal of Phytopathology*, 35(2):338–349. <https://doi.org/10.18781/r.mex.fit.1701-5>, and García-Rodríguez et al. (2021) *PhytoFrontiers*, 2(1):52–59. <https://doi.org/10.1094/PHYTOFR-06-21-0044-R> Figure reprinted/modified with permission.