سیویلیکا - ناشر تخصصی مقالات کنفرانس ها و ژورنال ها
گواهی ثبت مقاله در سیویلیکا
CIVILICA.com

## عنوان مقاله:

Race identification and responses of some Iranian barley genotypes to barley yellow rust in seedling and adult plant stages


## محل انتشار:

مجله به نژادی محصولات, دوره 8, شماره 2 (سال: 1397)

تعداد صفحات اصل مقاله: 17



## نویسندگان:

A. Zakeri - *Filed and Horticultural Crops Research Department, Agricultural and Natural Resources Research and Education Center of Fars Province, Agricultural Research, Education and Extension Organization, Zarghan, Iran.*

F. Afshari - *Seed and Plant Improvement Institute, Agricultural Research, Education and Extension Organization, Karaj, Iran.*

M. yassaie - *Filed and Horticultural Crops Research Department, Agricultural and Natural Resources Research and Education Center of Fars Province, Agricultural Research, Education and Extension Organization, Zarghan, Iran.*

H. Ghazvini - *Seed and Plant Improvement Institute, Agricultural Research, Education and Extension Organization, Karaj, Iran.*

F. Hassani - *Filed and Horticultural Crops Research Department, Agricultural and Natural Resources Research and Education Center of Fars Province, Agricultural Research, Education and Extension Organization, Zarghan, Iran.*

S. A. Safavi - *Agricultural and Natural Resources Research and Education Center of Ardabil Province, Agricultural Research, Education and Extension Organization), Ardabil, Iran.*

M. J. Minoo - *Filed and Horticultural Crops Research Department, Agricultural and Natural Resources Research and Education Center of Fars Province, Agricultural Research, Education and Extension Organization, Zarghan, Iran.*



## خلاصه مقاله:

Barley yellow rust is becoming increasingly important in many barley growing areas in Iran, including Fars Province. This research was carried out to evaluate the responses of ۲۷ commercial cultivars, ۳۱ introduction lines, ۳۶ promising lines and ۱۲ differential barley varieties to barley yellow rust at the adult plant stage, in three locations of Fars province (Zarghan, Marvdasht and Mammassani) in two successive cropping seasons (۲۰۱۴-۲۰۱۵ and ۲۰۱۵-۲۰۱۶), and at the seedling plant stage in greenhouse. Field trials in Zarghan and Marvdasht were inoculated with barley stripe rust isolate that was collected from Passargad region. The seedling responses of the genotypes were evaluated in the greenhouse with Passargad and Mammassani barley yellow rust isolates. At the adult plant stage, the majority of the genotypes had intermediate to susceptible responses while some genotypes showed moderately resistance to resistance responses to the disease.Most of the genotypes had moderately susceptible to susceptible responses (۷-۸) against both rut isolates at the seedling stage. Finally, cultivars and lines with coefficient of infections (CIs) lower than ۲۴ were selected for being recommended to farmers or used in breeding programs. Among the commercial barley cultivars, Nik, Behrohk, Fajre ۳۰, Nimrooz, Sahra, Zarjow, Aras and Loot and from introductions and promising lines,

۱۳ and ۱۰ lines, respectively, were selected. Most of the barley genotypes carried adult plant resistance or in combination with seedling resistance genes. Cultivars and lines with CIs between ۲۴ to ۳۵ and intermediate level of resistance were also considered for further evaluation. The rust isolates from Passargad and Mammassani were determined as races PSH-۷۴ and PSH-۹۰, respectively, based on the reactions of barley yellow rust differential .cultivars

## کلمات کلیدی:

Barley, yellow (stripe) rust, virulence, avirulence, resistance

## لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/1839729