

THE APPRAISAL OF DISEASE RESISTANCE TO BROWN SPOT (SEPTORIA HELIANTHI Ell. & Kell) IN VARIETIES RESOURCES OF SUNFLOWER

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ABSTRACT

The brown spot (Septoria Helianthi Ell. & Kell) occurs in sunflower production area of China without exception. It was seriouser in north-east of China. The brown spot of sunflower might bring about early blight of plant enen no harvest while it was outbreak. For this reason, the disease resistance of varieties to brown spot of sunflower was appraised from 1983 to 1986 in Jilin. The varieties on establishment period, were identified by means of artificial inoculation in the field. Four hundred and eighty varieties resource were identified during four years. The disease index were classified from 0 to 8. The resisting power to disease was differentiated: 0---immunity; 1 - 10% --- high resistance; 11 - 30%---middle resistance; 30-50%---middle susceptibility; 51-100%---high susceptibility. The results of identification showed that there were nine varieties with immunity among four hundred and eighty varieties. Six oilseed varieties (Ji5, Ji2, Ji3, Ji4, Ji6, and Ji1) and three nonoilseed varieties (Ji117, Ji118, and Ji119) were included. There were thirty-five highly resistant varieties, twenty-seven oilseed varieties (Ji10, Ji11, Ji12, Ji13, and so on) and eight non-oilseed varieties (Ji126, Ji127, Ji128, etc.). There were one hundred and twenty one varieties with middle resistance, and sixty oilseed varieties and sixty-one nonoilseed varieties. There were seventy-four varieties of middle susceptibility, and forty-seven of them were oilseed and twenty-seven nonoilseed. There were two hundred and forty-two varieties with high susceptibility, and thirty-three oilseed varieties and two hundred and nine nonoilseed varieties. There were significant difference for disease resistance among varieties which were identified. The resistant resources of oilseed varieties were more than that of non-oilseed varieties. The results of appraisal will provide resistant resources with breeding for disease resistance.