

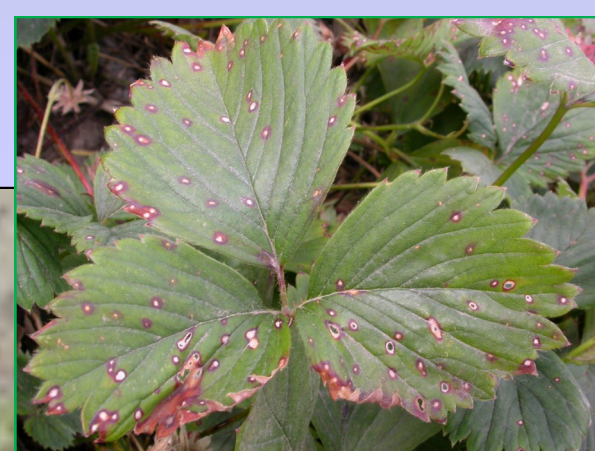
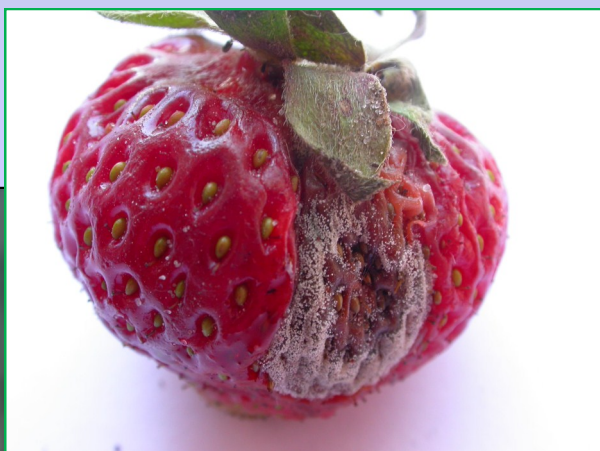
FIELD EVALUATION OF STRAWBERRY CULTIVARS SUSCEPTIBILITY TO FUNGAL DISEASES IN POLAND

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Diseases like grey mould (*Botrytis cinerea*), powdery mildew (*Sphaerotheca macularis*), leaf spot (*Mycosphaerella fragariae*), verticillium wilt (*Verticillium dahliae*), crown and leather rot (*Phytophthora cactorum*), anthracnose (*Colletotrichum acutatum*) can cause severe damage in strawberry production in Poland. The severity of diseases symptoms depends on weather conditions (Jarvis, 1964), susceptibility of cultivars (Muller, 1965) and level of infection source .

The aim of this study was to assess the susceptibility of strawberry cultivars to major fungal diseases

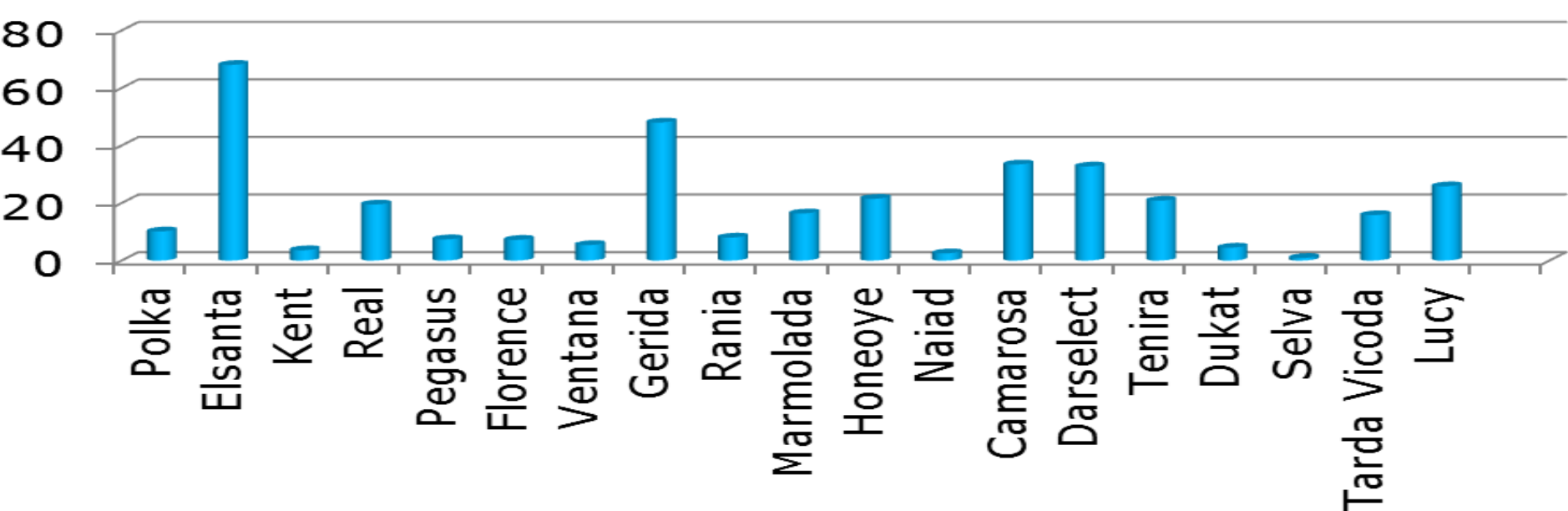


The susceptibility of 20 strawberry cultivars to 4 diseases (leaf spot, powdery mildew, grey mould and *Verticillium* wilt) was evaluated during three years 2009-2011.

Fig. 1. The severity of powdery mildew symptoms on different strawberry cultivars

Fig. 2. The severity of leaf spot symptoms on different strawberry cultivars

Percentage of affected leaves



Percentage of affected leaves

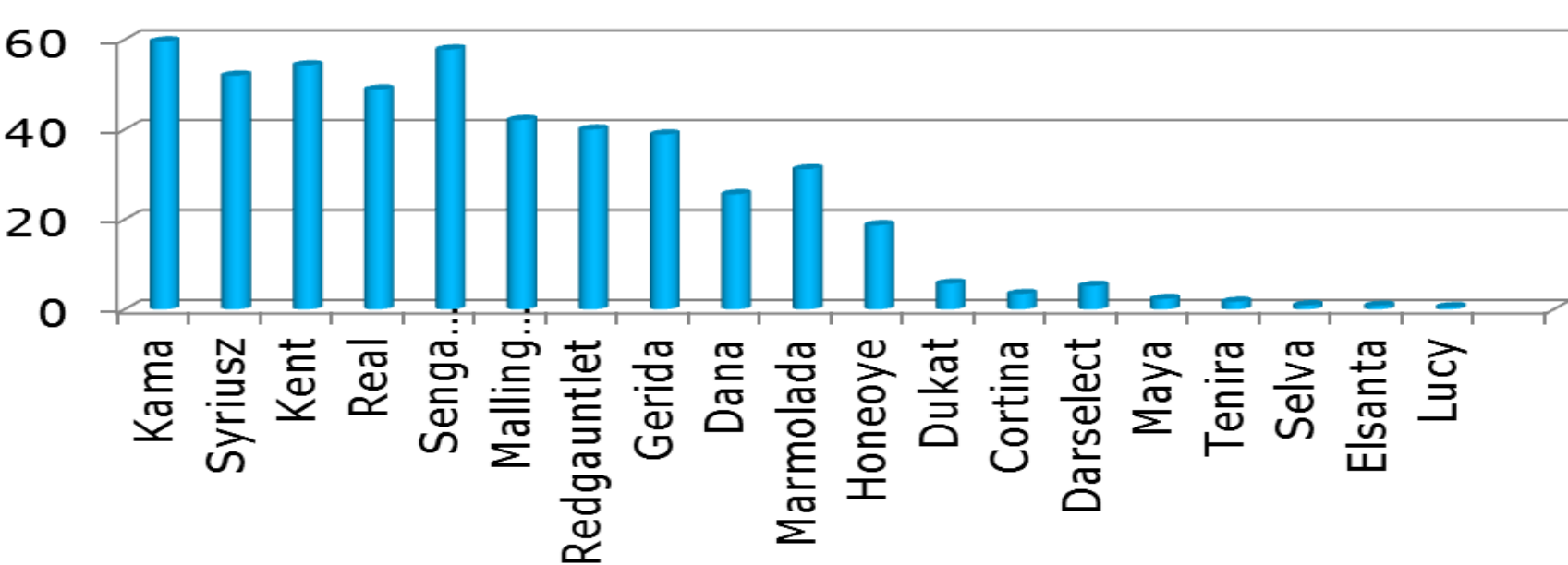


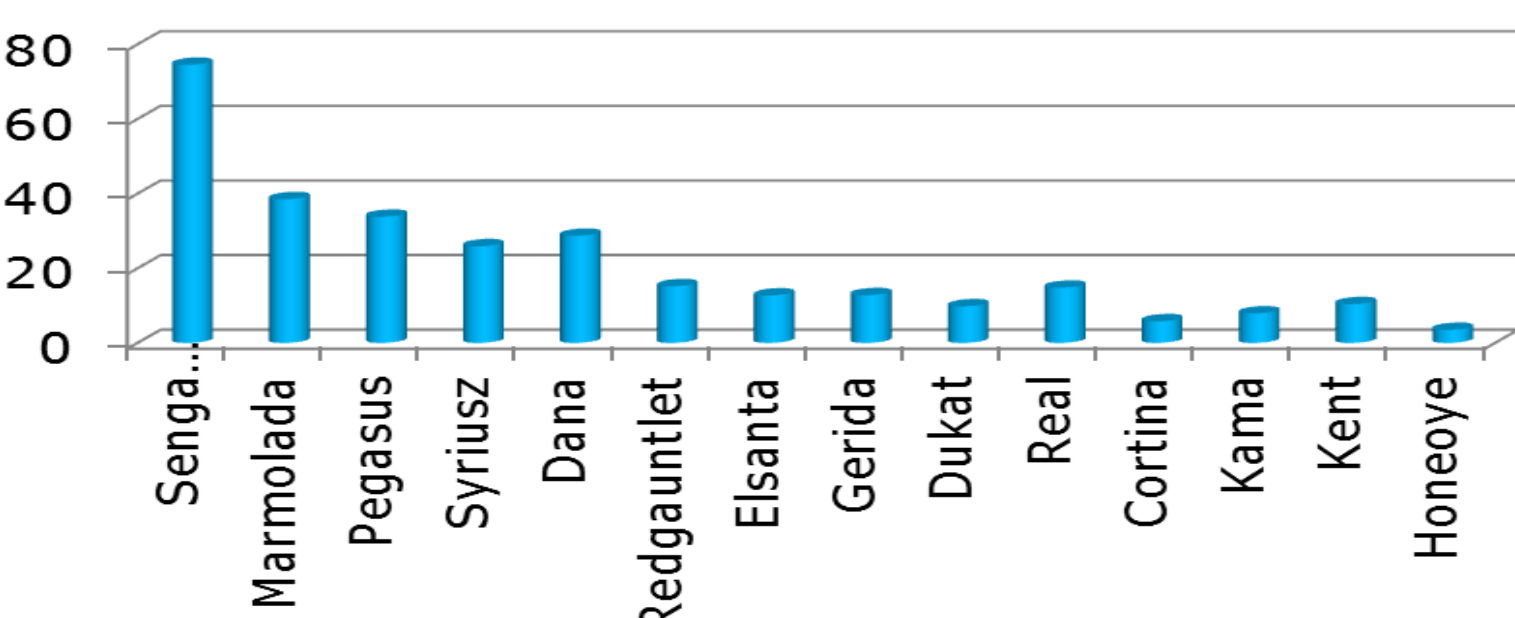
Table 1. Ranking of strawberry cultivars with regard to susceptibility to *Verticillium* wilt

Fig. 3. The severity of grey mould symptoms on different strawberry cultivars

Cultivar	Percentage of affected plants	Infestation index *
Darselect	0 a	0
Malling Pandora	0 a	0
Senga Sengana	0 a	0
Dukat	0.5 a	0.2
Filon	5.0 a	2
Real/Melody/Kama/Seal	12.4 ab	6.5-8.0
Pegasus	21.3 b	14
Marmolada	26.7 b	16
Maya	24.8 b	16
Aromas	38.3 bc	22
Ventana	40.9 bc	40
Selva	46.7 bcd	26
Albion	50.9 bcd	34
Thuriga	62.0 bcd	34
Tarda Vicoda	55.5 bcd	44
Honeoye	63.3 bcd	50
Camarosa	65.0 bcd	52
Elsanta	68.3 bcd	54
Onda	80.0 cd	70
Kent	85.2 cd	78
Diamante	92.8 d	70

* infestation index (the highest degree (5) in the ranking scale was taken as 100)

Percentage of affected fruits



- The most susceptible strawberry cultivars to grey mould were: Senga Sengana, Marmolada, Pegasus, Syriusz and Dana.
- Leaf spot occurred at the highest severity on Kama, Syriusz, Kent, Real and Senga Sengana cultivars.
- The most susceptible cultivars to powdery mildew were: Elsanta, Gerida, Camarosa, Marmolada and Darselect.
- Verticillium* wilt caused the highest damage on cv: Diamante, Elsanta, Camarosa, Onda and Elsanta

References

Jarvis W.R. 1964. The effect of some climatic factors on the incidence of grey muld of strawberry and raspberry fruit. Hort. Res., 3: 65-71.
Muller H.W.K. 1965. The present state of grey mould (*Botrytis cinerea*) control in strawberry growing. R.A.M.44, Part. 8, s. 408.

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