WOJCIECH ANTKOWIAK¹, MIECZYSŁAW CZEKALSKI²

MISTLETOE (*VISCUM ALBUM* L.) ON COMMON PEAR (*PYRUS × AMPHIGENEA* DOMIN EX DOSTÁLEK) NEAR POZNAŃ

From ¹Department of Botany and ²Department of Ornamental Plants The August Cieszkowski Agricultural University of Poznań

ABSTRACT. In the article there appearance of *Viscum album* is described on four trees of *Pyrus* \times *amphigenea*. It is the eighth case of European mistletoe appearance of *Viscum album* on native to Poland species of the pear tree.

Key words: European mistletoe, Viscum album, Pyrus ×amphigenea, Biedrusko, Poland

Mistletoe on a pear tree has been recorded very rarely in Poland. The semiparasite has only been found once on each of the alien species of callery pear (*Pyrus calleryana* Decne) and sand pear (*P. pyrifolia* (Burm.) Nakoi) grown in the Kórnik Arboretum (**Bojarczuk** 1971). The two species grow naturally in China. On the common pear (*P. communis* L.) mistletoe has been recorded seven times (**Bojarczuk** 1971). But was the *P. communis* the host in each case? The pear is known to be highly heterogeneous, i.e. to combine the properties of many species and cultivars escaped into the wild. We had a similar dilemma with host species identification when we found mistletoe-infested pear trees on the Military Range at Biedrusko near Poznań in 2004. They displayed many intermediate characteristics of various taxa, hence we decided to adopt the name *P. ×amphigenea* Domin ex Dostálek for those hybrids (**Seneta** and **Dolatowski** 2002).

On the Biedrusko Military Range, mistletoe has been found on four pear trees so far. The first tree had 122 cm in circumference and 9 m in height, a short trunk, and a low-growing crown. In the crown, practically along its entire length but mostly in the middle and on top, there had developed 15 specimens of the semiparasite 30-40 cm in circumference. All the mistletoes fruited. The second tree had two trunks 105 cm and 130 cm in circumference at a height of 60 cm where they started to diverge from the single common bole, and it reached a height of some 8 m. Throughout the crown there were numerous dense mistletoes more than 40 cm in circumference. The third tree also had two trunks (100 cm and 110 cm); one was already dead and the other dying. They also

Rocz. AR Pozn. CCCLXXII, Bot.-Stec. 8: 7-9

© Wydawnictwo Akademii Rolniczej im. Augusta Cieszkowskiego w Poznaniu, Poznań 2005
PL ISSN 1896-1908

formed one bole up to a height of 60 cm. Many mistletoes distributed throughout the crown were also dying like the trunks. The fourth tree had developed five trunks 130, 122, 100, 95 and 66 cm in circumference. In the top part of the crown 45 mistletoes of various sizes were recorded, but big plants at least 50 cm in circumference predominated.

The distribution of the pear trees with *Viscum album* on the Biedrusko Military Range is presented in Figure 1, and the degree of mistletoe infestation in Photographs 1 and 2.

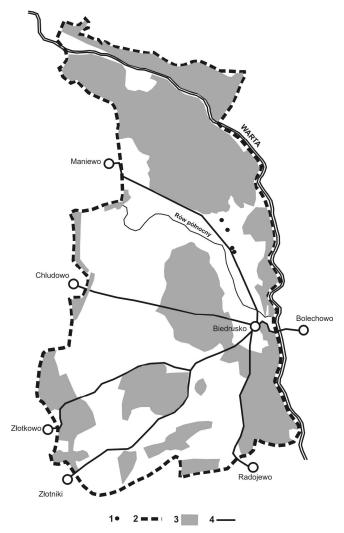


Fig. 1. Map of the investigated area: 1 – pear trees struck by mistletoe, 2 – military range border, 3 – forests, 4 – roads Ryc. 1. Szkic sytuacyjny terenu badań: 1 – drzewa gruszy porażone jemiołą, 2 – granica poligonu wojskowego, 3 – lasy, 4 – drogi

The common pear in Poland and Central Europe is a very rare host to mistletoe, hence each such finding is worth recording. According to **Tubeuf** (1923), the pear in this area displays immunity to mistletoe infestation. In turn, in southern Russia, the Crimea, the Caucasus and Armenia, the pear is the most popular host of mistletoe (**Bejlin** 1950). However, records of the semiparasite on pear in our country, while rare, show that the tree can be its host, too.

References

Bejlin I.G. (1950): Omela v zapadnoj Evropie i SSSR. Tr. Inst. Lesa 3: 328-350.

Bojarczuk T. (1971): Żywiciele jemioły pospolitej (*Viscum album* L.) w Polsce. Rocz. Sekc. Dendrol. 25: 189-203.

Seneta W., Dolatowski J. (2002): Dendrologia. Wyd. Nauk. PWN, Warszawa.

Tubeuf K. (1923): Monographie der Mistel. Oldenburg, München.

JEMIOŁA POSPOLITA (*VISCUM ALBUM* L.) NA GRUSZY POLNEJ (*PYRUS ×AMPHIGENEA* DOMIN EX DOSTÁLEK) W OKOLICY POZNANIA

Streszczenie

Grusza polna (*Pyrus* × *amphigenea*) w Polsce i w Europie Środkowej jest bardzo rzadkim żywicielem jemioły pospolitej (*Viscum album* L.). W pracy odnotowano wystąpienie jemioły na czterech drzewach *Pyrus* × *amphigenea* rosnących na Poligonie w Biedrusku. Na gruszach znajdowało się od 15 do 45 jemioł o średnicy od 30 do 50 cm. Jest to ósmy przypadek wystąpienia jemioły na rodzimym gatunku gruszy.

Przypadki znajdowania jemioły pospolitej na gruszy w naszym kraju świadczą, iż wymienione drzewo, wprawdzie rzadko, może być żywicielem tego półpasożyta.

Authors' addresses:

Wojciech Antkowiak, Katedra Botaniki, Akademia Rolnicza im. Augusta Cieszkowskiego w Poznaniu, ul. Wojska Polskiego 71 C, 60-625 Poznań, e-mail: wojtas@au.poznan.pl

Mieczysław Czekalski, Katedra Roślin Ozdobnych, Akademia Rolnicza im. Augusta Cieszkowskiego w Poznaniu, ul. Dąbrowskiego 159, 60-594 Poznań