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Materials for the distribution and ecology  
of the mistletoe (*Viscum album* L. subsp. *album* P. W. Ball)  
in central-eastern Poland. III. Vicinity of Kraśnik (Stary)

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Materiały do rozmieszczenia i ekologii jemioty pospolitej typowej (*Viscum album*  
L. subsp. *album* P. W. Ball) w środkowo-wschodniej Polsce.  
III. Okolice Kraśnika (Starego)

SUMMARY

The current state of occurrence of *Viscum album* L. subsp. *album* P. W. Ball on the physico-geographically determined area in the vicinity of the city of Kraśnik (Stary) (Fig. 1–8, Table 1) was described. The spatial distribution of the stations of this plant species and the taxonomic composition of its hosts were taken into account. A total of 74 group-of-specimens and single-specimen stations of *Viscum album* subsp. *album* were located that live on 13 tree taxons (Fig. 2, Table 1). It was found that the local occurrence of this plant species is limited almost exclusively to synanthropic stations.

STRESZCZENIE

Na badanym terenie stwierdzono występowanie 74 grupowych i pojedynczych stanowisk jemioty pospolitej typowej (*Viscum album* subsp. *album*) o dość charakterystycznym przestrzennym ich rozmieszczeniu (ryc. 2). Najliczniej zgrupowane są one w obrębie centralnej części miasta Kraśnika, o najbardziej zwartej zabudowie. Następne największe zgrupowanie stanowisk omawianej rośliny znajduje się w skrajnie południowo-wschodniej części badanego terenu, na podmokłym dnie i nieco suchszych zboczach doliny rzeczki Wyżnicy w rejonie kilku stawów rybnych (ryc. 2). Poza tym stosunkowo liczne stanowiska występują przy bardziej ruchliwych szosach. Pozostałe, nieliczne i rozproszone, notowano tylko w miejscach położonych w niewielkiej odległości od bardziej ruchliwych szos. Brak zupełnie stanowisk *Viscum album* subsp. *album* na dużych przestrzeniach pól uprawnych, łąk, a szczególnie wśród lasów. Ponadto zwraca uwagę sporadyczne

występowanie badanej rośliny w sąsiedztwie torów kolejowych, stawów, rzeczek i ich dopływów.

Łącznie stwierdzono występowanie *Viscum album* subsp. *album* na 13 taksonach żywicieli (tab. 1). Należy podkreślić fakt, że na badanym terenie wymieniony podgatunek jemioty pasożytuje niemal wyłącznie na żywicielach rosnących w wyniku ich zasadzenia. Odnosi się to do drzew i drzewkowatych postaci krzewów, zarówno rodzimych, jak i obcych. Najpospoliciej występuje ona na *Populus x euramericana*. W grę tu wchodzi przede wszystkim trzy podstawowe, krytyczne odmiany *Populus x euramericana*: „*Robusta*”, „*Serotina*” i „*Marilandica*”. Z kolei *Viscum album* subsp. *album* najczęściej pasożytuje na *Acer platanoides*. Poza tym notowano ją tylko na pojedynczych stanowiskach z 1 do 2 okazami żyjącymi na: *Acer saccharinum*, *Crataegus monogyna* „*trilobata*”, *C. x media* „*Paul's scarlet*” var. „*Rosea*”, *Robinia pseudoacacia*, *Malus domestica*, *Fraxinus excelsior* i *Salix fragilis*. Godne podkreślenia są pojedyncze, ale liczne jej stanowiska notowane na starych okazach *Tilia cordata*, *Populus x berolinensis* i *P. trichocarpa*. Zwraca uwagę sporadyczna obecność tej rośliny na drzewach ogrodowych.

Na obszarze Polski, jak dotąd, podobne przypadki korelacji na poziomie *Viscum album* subsp. *album* — żywiciel stwierdzono tylko w okolicach Tarnobrzega (18) i Stalowej Woli (19).

**Key words:** Mistletoe (*Viscum album* L. subsp. *album* P. W. Ball.), stations and ecology, Lublin Upland, Poland.

#### INTRODUCTION

The general range of the typical mistletoe *Viscum album* subsp. *album* is of the submeridional-Eurasian type (1, 6, 11) In Poland it is regarded as a widespread plant species yet with an uneven density of stations from the Baltic coast to the lower parts of the Carpathian and Sudeten Mountains (2, 15). Despite numerous studies conducted on the occurrence and ecology of this plant species, no definite connection has yet been established between the plant and any biotopic conditions and hosts (15, 17, 18, 19 and references quoted).

The existing data relating to the occurrence of *Viscum album* subsp. *album* in the investigated vicinity of Kraśnik are accidental and highly incomplete (2, 5). In central-eastern Poland the identical scope of investigations on the occurrence and ecology of *Viscum album* subsp. *album* has so far been conducted only in the vicinity of Tarnobrzeg (18) and Stalowa Wola (19).

Every year there is a growing need for mistletoe specimens for various purposes (15, 17). It is being bought in increasing numbers by the pharmaceutical industry agencies. It is also commonly used as ornamentation. Its exports to Western European countries have been successively growing in recent years. Under such circumstances there is a growing fear that the natural and semi-natural stations of the mistletoe are likely to be highly thinned or entirely destroyed before we manage to investigate its natural distribution and principal ecological properties.

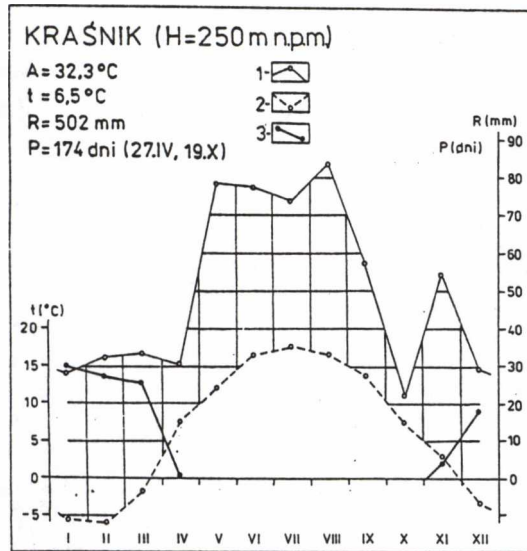


Fig. 1. The climatic diagram of Kraśnik in 1962–1965. After Meteorological and Precipitation Yearbook (Rocznik Meteorologiczny i Opadów Atmosferycznych). PIHM, Warszawa (16)

A — air temperature amplitude of monthly averages, T — mean annual air temperature, R — mean annual precipitation volume, P — average dates of last and first freezes; 1 — average monthly precipitation, 2 — average monthly air temperatures, 3 — monthly averages of days with snow

Table 1. The structure of occurrence of *Viscum album* subsp. *album* in the vicinity of Kraśnik (Stary)

Tree host taxons of <i>Viscum album</i> subsp. <i>album</i> and tree letter markings in station descriptions	Number of specimens:		
	stations	host taxon	<i>Viscum album</i> subsp. <i>album</i>
A <i>Acer negundo</i>	1	1	1
B <i>Acer platanoides</i> 11	22	48	3
C <i>Acer saccharinum</i> .	1	2	3
D <i>Crataegus x media</i> "Paul's Scarlet"	1	1	1
E <i>Crataegus monogyna</i> "trilobata"	1	1	3
F <i>Fraxinus pensylvanica</i>	3	4	15
G <i>Malus domestica</i>	2	2	26
H <i>Populus x euramericana</i>	50	117	370
I <i>Populus x berolinensis</i>	1	2	23
J <i>Populus trichocarpa</i>	1	3	38
K <i>Robinia pseudoacacia</i>	1	1	1
L <i>Salix fragilis</i>	1	1	1
M <i>Tilia cordata</i>	1	4	35
Total	(74)	161	565

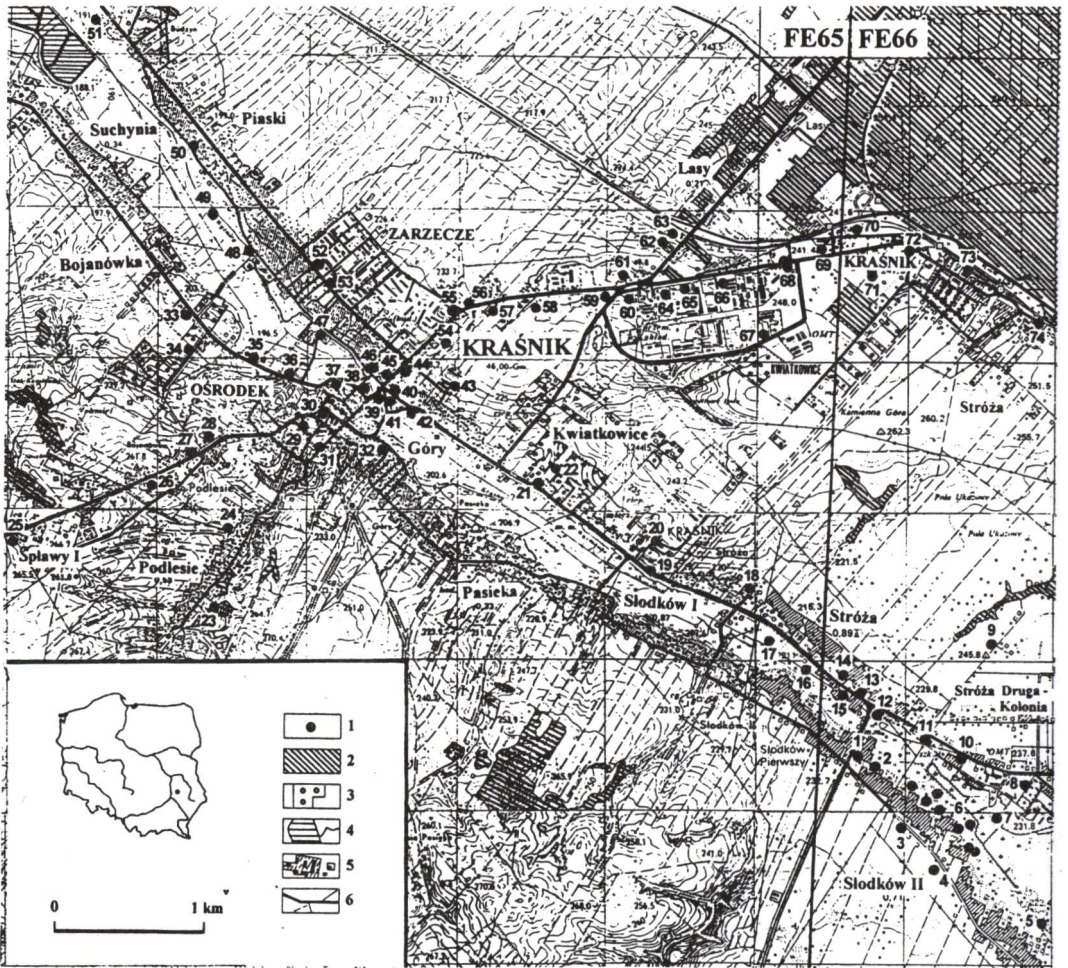


Fig. 2. Map of 74 stations of *Viscum album* subsp. *album* in the vicinity of Kraśnik (Stary)

#### SCOPE OF INVESTIGATION

The current state of occurrence of a subspecies of the mistletoe (*Viscum album* subsp. *album*) in the specified area in the vicinity of the city of Kraśnik and its surroundings was described (Fig. 2). Data on the subject were collected in 1997–1999.

In the specification of individual stations of the mistletoe the following were listed: their local position, home range, the general condition of spatial economy and tree-covering, and the number of species and hosts and the numbers of mistletoe shrubs growing on them.



Fig. 3. Mistletoe (*Viscum album* subsp. *album*) in the crowns of old specimens of *Tilia cordata*.  
Stróża Druga, station no. 7

Photo by F. Świąć



Fig. 4. Mistletoe (*Viscum album* subsp. *album*) in the crowns of *Populus x trichocarpa*. Kraśnik,  
station no. 40

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Fig. 5. Mistletoe (*Viscum album* subsp. *album*) in the crowns of *Populus x berlinensis*.  
Kraśnik, station no. 44

Photo by F. Świąż



Fig. 6. Mistletoe (*Viscum album* subsp. *album*) in the crowns of *Populus x euramericana*.  
Kraśnik, station no. 49

Photo by F. Świąż



Fig. 7. Mistletoe (*Viscum album* subsp. *album*) in the crowns of *Populus x euramericana*.  
Kraśnik, station no. 53

Photo by F. Świąż



Fig. 8. Mistletoe (*Viscum album* subsp. *album*) in the crowns of *Populus x euramericana*.  
Kraśnik, station no. 59

Photo by F. Świąś



The investigated mistletoe stations were located on the appended map of the investigation area (Fig. 2). The naming of the host taxons belonging to trees and shrubs was given after Seneta and Dolatowski (14).

#### EXPLANATION OF MARKINGS

The following letter markings for the taxons of its tree and shrub hosts were used in the descriptions of the localized mistletoe stations:

- A — *Acer negundo* L.
- B — *Acer platanoides* L.
- C — *Acer saccharinum* Marshal
- D — *Crataegus x media* Bechst. vr. "Paul's Scarlet"
- E — *Crataegus monogyna* Jacq.
- F — *Fraxinus excelsior* L.
- G — *Malus domestica* Borkh.
- H — *Populus x euramericana* (Dode) Guiner
- I — *Populus x berolinensis* (K. Koch) Dippel
- J — *Populus trichocarpa* Torr. Et Gray ex Hook
- K — *Robinia pseudoacacia* L.
- L — *Salix fragilis* L.
- M — *Tilia cordata* Mill.

The first figure preceding the particular host taxon (A–M) denotes the total numbers of its specimens. The figures given after the "r" mark relate to the amount of mistletoe shrubs living on successive, single specimens of a particular host taxon.

#### THE AREA OF INVESTIGATION

Studies on the mistletoe occurrence were conducted on the territory of the historically oldest city of Kraśnik (Stary, Lubelski) and in its closest surroundings (Fig. 2). Practically, this is an area delimited for investigation, in the rectangular form of 44 sq. km. Administratively, this area is situated in the central-western part of the Lublin Province, in the municipal *gmina* (commune) of Kraśnik. The main, central part of the studied territory is the unevenly close built-up area of the city. Geobotanically and physico-geographically these are the areas occupying almost the central part of Urzędowskie Heights in the southwestern Lublin Upland at 188–273 m above sea level (3, 4, 7, 10). The very centre of the area in question is halved in the SE–NW direction by the rivulet of Wyżnica. It flows in a wide

and fairly extended wet valley crossed by trenches and drainage ditches (12). There are sparse complexes of fishponds there. On either side of the Wyznica river valley there are slopes and upland ridges of flattop hills. Generally, they are folded to a different extent and crossed by erosional forms such as dry valleys and ravines. The oldest bedrock is the cracked gneiss of the Upper Cretaceous period (3, 7, 13). The top bedrock layer is composed of two principal kinds of Quaternary covers. In the Wyznica river valley they are mostly alluvial covers, chiefly dusty-sandy, less often humus or peat soils (20, 21). On the slopes and ridges of flattop hills, however, there are heaps of typical loess or loess-like loam up to several dozen-metre thick (7, 16, 21). Upon those Quaternary formations two main soil forms developed (20, 21). In the Wyznica valley, humus-dusty or sandy alluvial soils dominate, with a different degree of wetting. On the slopes and ridges of flattop hills there are widespread deep, typical brown or acid brown soils lying on loess and drained to a different degree. The acid brown soils often contain limestone rock grains.

In the studied area there are no more than several scattered forest complexes of varying size. In the rural areas and among the vast farming fields and near farm buildings there are often orchards. The city of Kraśnik is on average weakly artificially tree-covered. Apart from a large municipal cemetery and a small city park, the comparatively largest tree-cover is found in places in the Wyznica rivulet valley. In more busy roads worth noting are numerous row clusters of planted trees, chiefly composed of hybrid species of the genus *Populus*, less often *Tilia cordata*, *Acer pseudoplatanus*, *Robinia pseudoacacia*, *Fraxinus excelsior* and others. Moreover, in the whole of the investigated area there are fairly often monocultures of exotic trees mainly composed of hybrid taxons of the genus *Populus*.

In general, the climatic conditions of the area run similar to the neighbouring regions of the Lublin Upland (9, 15, 16, 22, 23; Fig. 1). The vegetation period lasts ca. 200–210 days. The mean annual air temperature ranges between 7.6–7.8°C. The average annual precipitation ranges between 520–560 mm. The contamination of the natural environment in the studied area is low and determined chiefly by automobile exhausts (8).

#### THE SURVEY OF THE MISTLETOE STATIONS INVESTIGATED (FIG. 2)

1. Słodków Drugi, NW part, E-side of the local road. The edge of a yard near the town buildings, with several trees: 1 H/2.

2. Słodków Drugi, NW part, N-side of the local road, near farm buildings. The slope of the Wyznica valley, sparsely tree-covered. Over a several-are extent, among three small rows of trees: 6 F/3, 4, 3, 2, 2, 1.

3. Stodków Drugi, SW-side of the local road. The roadside, unbuilt area near farming fields. On two separate tree specimens: 2 H/16, 3.
4. Stodków Drugi, SW-side of the local road. Among the farming fields, an orchard near remote farm buildings: 1 G/25.
5. Stodków Drugi, NE part, near a country road. The Wyżnica valley bottom, unbuilt, sparsely tree-covered. A small tree row, a dozen-odd-metre section: 2 H/2, 7.
6. Stodków Drugi, central-northern part. The Wyżnica valley bottom, wet, irregularly tree-covered, on a dozen-hectare stretch: 9 H/2, 1, 2, 2, 1, 1, 5, 2, 4.
7. Stodków Drugi, NE part. A Wyżnica valley slope, above the ponds of their NE-side. An unbuilt area with several small tree rows. A ca. 70-metre section: 4 M/15, 17, 2, 1.
8. Stróża Druga-Kolonia, SE part, S-side of the local road. A square with sparse trees, near buildings: 1 F/1.
9. Stróża Druga-Kolonia, NW part. Near several isolated farm buildings among the farming fields. Near a country road on a dozen-odd-metre stretch: 2 H/2, 9.
10. Stróża Druga-Kolonia near the „Metabet S. C.” premises and the local road. A thin row of roadside trees: 1 H/1.
11. Stróża Druga-Kolonia, near the post-office and high school building, near the road. A thin row of roadside trees, on a dozen-odd-metre stretch: 2 H/1.
12. Stróża, SE part, the corner of local roads. The rim of the Wyżnica valley bottom, wet, medium-dense tree-covered: 1 H/1.
13. Stróża, NE part, near the local road, in the vicinity of farm buildings. A thin row of roadside trees: 1 H/1.
14. Stróża, NE part, N-side of the local road. The rim of a farm backyard with several buildings and trees: 1 F/1.
15. Stróża. SW part, S-side of Janowska St., on the Wyżnica rivulet. A small, semi-natural leafy forest on a wet meadow, in a thin row of high trees, chiefly of genera *Populus*, *Salix*: 1 H/16.
16. Stróża. SW part, S-side of Janowska St., on the Wyżnica rivulet. A small, semi-natural leafy forest on a wet meadow, in a thin row of high trees of genera *Populus* and *Salix*: 1 H/1.
17. Stróża. SW part, S-side of Janowska St., on the Wyżnica rivulet. A small, semi-natural leafy forest on a wet meadow, in a thin row of high trees mainly of genera *Populus* and *Salix*: 1 H/1.
18. Stróża, NW part, not far N of the road of Janowska St. A square near farm buildings with sparse trees: 1 B/3.
19. Kraśnik, SE part, NE-side of Janowska St. A square between the road and farm buildings, with numerous trees. On a ca. several-are area: 2 B/1, 2.
20. Kraśnik, SE part, NE-side of Janowska St. A square between farm buildings, with numerous trees. On a ca. several-are area: 2 B/1, 2.
21. Kraśnik, SE part, Kwiatkowice, N-side of Janowska road. An area with several trees between the road and the square near a brick building: 1 H/8.
22. Kraśnik, SE part, Kwiatkowice, not far N of Janowska St. The rim of a dozen-are monoculture of trees of genus *Populus*: 1 H/1.
23. Kraśnik, SW part, Podlesie, SE-side of Podlaska St. The ridge of a hillock near isolated buildings, on the rim of a several-are plantation of trees of genus *Populus*: 1 + 3 H/1 + 1, 1, 2.
24. Kraśnik, SW part, Podlesie, NW of Podlaska St. The ridge of a hillock, near buildings, on the rim of a several-are plantation of trees of genus *Populus*: 1 H/5.
25. Kraśnik, SW part, Podlesie-Spławy, SE-side of Cegielniana St. An unbuilt roadside area, with a thin tree row: 1 B/1.
26. Kraśnik, SW part, Podlesie, SE-side of Cegielniana St. An unbuilt roadside area, with a thin tree row: 1 B/1.

27. Kraśnik, SW part, Podlesie, the corner of Cegielniana St. and Żytunia St., W of the road. The edge of a densely built-up and weakly tree-planted area: 1D/1.
28. Kraśnik, SW part, Podlesie, between the junction of Cegielniana St., Żytunia St. and Cmentarna St. The area of the heavily tree-covered municipal cemetery. On a dozen-are stretch: 6 B/4, 1, 2, 1, 1, 1.
29. Kraśnik, SW part, city centre, between Kościuszki St. and Wierzbowa St. The edge of a square, at a building, with several trees: 1 H/1.
30. Kraśnik, SW part, city centre, Plac (Sq) Wolności. The area surrounded by close urban development, with numerous trees. On a ten-metre tract: 2 B/8, 2.
31. Kraśnik, SW part, city centre, SE-side of Strażacka St. A heavily tree-covered terrain slope. On a dozen-odd metre stretch: 2 C/2, 1.
32. Kraśnik, SW part, NW-side of Zaklikowska St, on the SE scarp slope above Wąwózowa St. In a small tree cluster: 1 L/1.
33. Kraśnik, W part, Oboźna St. An unbuilt roadside area, with a thin row of trees: 1 H/1.
34. Kraśnik, W part, Żytunia St., near several farm buildings. A roadside area, with a thin row of trees: 1 H/1.
35. Kraśnik, W part, a health centre, N-side of Oboźna St. A roadside area, with several trees, near an orchard: 2 H/2, 10.
36. Kraśnik, W part, a health centre, NE-side of Oboźna St., on either side of Zamkowa St, W-side of a sports stadium. An unbuilt park ground. On a dozen-odd-are stretch: 4 H/1, 5, 2, 1.
37. Kraśnik, W part, city centre, SW-side of Oboźna St. An unbuilt roadside area, with several trees: 1 H/2.
38. Kraśnik, W part, city centre. The corner of Jagiellońska St. and Lubelska St. from W-side. NE-fringe of the PKS (Bus) terminal square, on the Wyzniana rivulet. In a row-planted group of trees: 1 H/1.
39. Kraśnik, W part, city centre. The corner of Lubelska and Mostowa St. from SW-side, on the Wyzniana rivulet. Low-housing area, heavily tree-covered. On a dozen-odd-metre stretch: 2 H/1, 2.
40. Kraśnik, W part, city centre. In Narutowicza St. in a several-tree specimen group: 3 J (21, 6, 11). In the square around the cinema building among numerous trees: 5 H/1, 1, 4, 2, 2.
41. Kraśnik, SW part, city centre. NE-side of Struga St. near Lubelska St. A square near some buildings, with a row of sparse trees. On a several-kilometre stretch: 2 G/2, 4.
42. Kraśnik, SW part, city centre. NE-side of the border area between Janowska St. and Struga St. A square near buildings, with a row of sparse trees. On a several-kilometre stretch: 2 B/7, 2.
43. Kraśnik, SW part, city centre, not far NE of the end part of Armii Krajowej St. An unbuilt area, with several scattered trees: 1 H/4.
44. Kraśnik, SW part, city centre. NE-side of Lubelska St, not far SW of Armii Krajowej St. A roadside area, near isolated buildings with several trees. On a several-metre stretch: 2 I/20, 3.
45. Kraśnik, SW part, city centre, between municipal blocks of flats, near a driveway. A thin row of trees: 1 H/1.
46. Kraśnik, SW part, city centre. NW-side of Lubelska St. The square near the PKO (Savings Bank) building, with several trees: 1 H/1.
47. Kraśnik, NW part, city centre. The corner of Jagiellońska St. and Parkowa St, on the Wyzniana rivulet, the fringe of the city park. On a dozen-odd-metre stretch: 2 H/2, 2.
48. Kraśnik, NW part, Bojanówka, N of Przechodnia St. SW-side of Jagiellońska St., on the Wyzniana rivulet, near an old mill. The fringe of a small, dense leafy forest: 1 H/3.
49. Kraśnik, NW part, Suchynia. SW-side of Urzędowska St. The Wyzniana rivulet valley, a small, thin leafy forest: 1 H/3.

50. Kraśnik, NW part, Suchynia — Piaski. SW-side of Urzędowska St. The Wyzńica rivulet valley. A backyard between buildings, with sparse trees: 1 H/1

51. Kraśnik, NW part, Suchynia — Budzyń. SW-side of Urzędowska St. The Wyzńica rivulet valley. A backyard between buildings, with sparse trees. On a dozen-odd-metre stretch: 2 H/1, 1.

52. Kraśnik, NW part, Zarzecze. The corner of Urzędowska St. and Nowa St. from the E-side. An unbuilt roadside area, with several trees: 1 H/10.

53. Kraśnik, NW part, Zarzecze. NE-side of Urzędowska St., S of Szopena St. A square between the road and buildings, weakly and unevenly tree-planted. In a tree row near the road, on a dozen-odd metre stretch: 6 H/2, 1, 2, 2, 1, 2. Among scattered trees on the square: 1 H/3.

54. Kraśnik, N part, Pasięka — Kwiatkowie, ca. 150 m SE of Lubelska St. The ground of deserted, unbuilt farming fields. A small, isolated plantation with *Populus sp.* In a local depression. On a several-dozen-metre stretch: 3 H/2, 3, 3.

55. Kraśnik, N part, Zarzecze. The corner of Lubelska St. and Tysiąclecia Ave. from NW-side. A small, fenced square at the District Court building, with several trees. On a several-metre stretch: 2 F/2, 11.

56. Kraśnik NE part, Zarzecze, N-side of Lubelska St., not far E of Tysiąclecia Ave. The square around the Police building, with sparse trees. On a several-dozen-metre stretch: 2 H/10, 4.

57. Kraśnik NE part, Kwiatkowie — Zarzecze. S-side of Lubelska St., the fringe of a square near the Electricity Plant, with sparse trees. On a several-metre stretch: 1 B/4, 1 G/1.

58. Kraśnik NE part, Kwiatkowie — Zarzecze. Not far S of Lubelska St. The fringe of a square corner at the ZDZ (Vocational Improvement Institution) building, with a thin tree row. On a several-dozen-metre stretch: 3 H/5, 4, 2.

59. Kraśnik NE part, Kwiatkowie — Zarzecze. The corner of Lubelska St. and Przemysłowa from SW-side. A grassy square, with several trees: 1 H/30.

60. Kraśnik, NE part, S-side of the border area of Lubelska St. and Kolejowa St. A square between the road and the buildings, with sparse trees: 1 H/7.

61. Kraśnik, NE part, Kwiatkowie, N-side of the junction of Lubelska St., Kolejowa St. and Przemysłowa St. The square fringe near the CPN filling station building. A dense row of low trees. On a dozen-odd-metre stretch: 2 B/1, 1; 1 E/2.

62. Kraśnik, NE part, the corner of Lubelska St. and the railway tracks from NW-side. A fenced military ground, with several buildings, very densely tree-planted. On a dozen-odd-metre stretch: 5 H/1, 6, 3, 1, 2.

63. Kraśnik, NE part, the corner of Lubelska St. and the railway tracks from NE-side. An unbuilt square on the fringe of a several-acre tree plantation of the genus *Populus*: 1 H/4.

64. Kraśnik, NE part, Kwiatkowie, N-side of Kolejowa St., not far E of the bend of Lubelska St. The fringe of a square without trees between the road and the Road and Bridge Authority buildings. On a several-dozen-metre stretch: 6 H/5, 1, 1, 1, 2, 2.

65. Kraśnik, NE part, Kwiatkowie, S-side of Kolejowa St., not far N of the bend of Lubelska St. The fringe of a square opposite the Bakery building. The roadside grass, with a thin tree row. On a several-dozen-metre stretch: 3 H/1, 2, 15.

66. Kraśnik, NE part, Kwiatkowie, S-side of Kolejowa St., opposite its junction with Lubelska St. The fringe of the area opposite the Industrial Plant buildings. A roadside square with a thin tree row. On a several-dozen-metre row: 4 H/2, 5, 1, 1 A/1.

67. Kraśnik, NE part, Kwiatkowie, N-side of Obwodowa St. The fringe of the area opposite the Liquor Wholesales premises. A roadside square, with a small and thin tree row. On a several-dozen-metre stretch: 2 H/3, 1.

68. Kraśnik, NE part, either side of Kolejowa St., W-side of its junction with Obwodowa St. An unbuilt area, with thin rows of roadside trees: 2 H/2, 4.

69. Kraśnik, NE part, N-side of Kolejowa St., W of the road leading to Zakrzowiecka St. An unbuilt area, with a small and thin tree row: 1 K/1.

70. Kraśnik, NE part, not far S of Kolejowa St., an old reloading yard, unbuilt, with few scattered tree groups. On a dozen-odd-are stretch: 1 + 3 H/1 + 4, 1, 1.

71. Kraśnik, NE part, Kwiatkowice, not far S of Kolejowa St. On the rim of a heavily tree-covered military ground, closely built-up: 2 H/1, 4.

72. Kraśnik, NE part, Kwiatkowice, S-side of Kolejowa St., near its bend towards SE. In front of the fenced area of the Military Facilities. A small, thin row of roadside trees. On a dozen-odd-metre stretch: 2 H/1, 2.

73. Kraśnik, NE part, Kwiatkowice, NE-side of Kolejowa St., the fringe of the loading yard of the PKP railway station, with few scattered trees: 1 H/1.

74. Kraśnik, NE part, NE-side of Towarowa St. The PKP railway station. A gravel square, with several scattered trees: 1 H/1.

#### DISCUSSION OF RESULTS

74 group-of-specimens and single-specimen stations of the typical mistletoe (*Viscum album* subsp. *album*) were recorded in the area investigated. Their spatial distribution is fairly characteristic (Fig. 2). The most numerous groupings are found within the central, most closely built-up part of the city of Kraśnik. The second largest group of mistletoe stations in the investigated area was recorded in its south-easternmost part. They occupy the wet bottom and somewhat drier slopes of the Wyzńica rivulet valley in the vicinity of several fishponds (Fig. 2). The next comparatively most numerous stations of the mistletoe subspecies occur near more busy roads. The remaining few mistletoe stations were reported only in sites situated very close to more busy roads. No stations whatever of *Viscum album* subsp. *album* were recorded on the vast expanses of farming fields, meadows or in the forests. Moreover, worth noting is the sporadic occurrence of the mistletoe near ponds, rivulets and their tributaries, or near railway tracks etc.

Altogether, the occurrence of *Viscum album* subsp. *album* was reported on ten host taxons (Table 1). It must be emphasized that they are the specimens of mistletoe hosts that grow only as a result of planting. Far more commonly the mistletoe is found with *Populus x euramericana*. Three basic, critical varieties of *Populus x euramericana*: "Robusta", "Serotina" and "Marilandica" are taken into consideration here. In turn, *Viscum album* subsp. *album* occurs most often on the planted specimens of *Acer platanoides*. Apart from that it was recorded only on single stations with one or two specimens living on: *Acer saccharinum*, *Crataegus monogyna* "trilobata", *C. x media* "Paul's Scarlet", *Robinia pseudoacacia*, *Malus domestica*, *Fraxinus excelsior* and *Salix fragilis*. Worth noting is the only but numerous-specimen group station of the mistletoe growing on old specimens of *Tilia cordata*.

Attention should also be drawn to the sporadic occurrence of the mistletoe on planted garden trees. It was absolutely not recorded on hosts with natural stations. In general, the occurrence of *Viscum album* subsp. *album* in the vicinity of Kraśnik is limited exclusively to synanthropic hosts and stations. Essentially, the local spatial distribution of the stations of *Viscum album* subsp. *album* is largely determined directly by the number of potential, planted host specimens.

In Poland, similar cases of correlation between *Viscum album* subsp. *album* and the host have so far been reported only in the vicinity of Tarnobrzeg (18) and Stalowa Wola (19).

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