**Supplementary Material Table S1.** Basic information about the survey sample site

| Sample plot | District | Landscape greening pest control modes | Longitude | Latitude | Elevation / m | Mean diameter at breast height / cm | Mean tree height / m | Principal species |
|---|---|---|---|---|---|---|---|---|
| 1 | Fangshan district | Light trapping | 115.90111E | 39.7413N | 304 | 12.11 | 10.67 | *Quercus variabilis* Bl., *Morus alba* L., *Diospyros lotus* L., et al. |
| 2 | Fangshan district | Light trapping | 115.90139E | 39.743N | 327.49 | 13.70 | 11.24 | *Q. variabilis*, *D. lotus*, et al. |
| 3 | Fangshan district | Light trapping | 115.9014E | 39.7451N | 329.92 | 15.04 | 14.28 | *Q. variabilis*, *M. alba*, *D. lotus*, et al. |
| 4 | Fengtai district | Light trapping | 116.28056E | 39.81306N | 45 | 14.70 | 12.54 | *Sophora japonica* Linn., et al. |
| 5 | Fengtai district | Light trapping | 116.28083E | 39.81306N | 46.18 | 14.95 | 10.32 | *Robinia pseudoacacia*, *Pinus tabuliformis* Carr., et al. |
| 6 | Fengtai district | Light trapping | 116.28111E | 39.81306N | 44.58 | 11.67 | 4.83 | *R. pseudoacacia*, *Amygdalus persica* L., et al. |
| 7 | Dongcheng district | Trap hanging | 116.42694E | 39.93417N | 43 | 21.18 | 5.44 | *Malus spectabilis* (Ait.) Borkh., *Cedrus deodara* (Roxb.) G. Don, et al. |
| 8 | Dongcheng district | Trap hanging | 116.42654E | 39.93441N | 42.1 | 19.04 | 7.91 | S. *japonica, Platanus orientalis L., Q. Variabilis, Picea asperata* Mast., et al. |
| 9 | Dongcheng district | Trap hanging | 116.4269E | 39.93456N | 42.1 | 23.35 | 9.00 | *Ailanthus altissima* (Mill.) Swingle*, P. orientalis, Cupressus funebris* Endl., et al. |
| 10 | Haidian district | Natural enemy release | 116.19917E | 39.98944N | 79.9 | 23.09 | 12.53 | *C.funebris*, *Ulmus pumila* L., *S. japonica,* et al. |
| 11 | Haidian district | Natural enemy release | 116.19842E | 39.98766N | 84.8 | 26.89 | 9.11 | P. *tabuliformis*, *Juglans regia*, *U. pumila, S. japonica,* et al. |
| 12 | Haidian district | Natural enemy release | 116.19643E | 39.98424N | 82 | 21.30 | 6.25 | *Pinus bungeana* Zucc. ex Endl., *S. japonica, Ginkgo biloba* L.*,* et al. |
| 13 | Daxing district | Natural enemy | 116.23778E | 39.685N | 30.416 | 20.82 | 8.13 | *Koelreuteria paniculata* Laxm., *Populus* L, *U.* |

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| | | release | | | | | | *pumila, R. pseudoacacia,* et al. |
| 14 | Daxing district | Natural enemy release | 116.23E | 39.68889N | 32.43 | 19.21 | 6.40 | *R. pseudoacacia, P.tabuliformis, U. pumila,* et al. |
| 15 | Daxing district | Natural enemy release | 116.22972E | 39.68833N | 32.68 | 20.57 | 7.68 | *R. pseudoacacia,* et al. |
| 16 | Shijingshan district | Biological agent application | 116.22028E | 39.91028N | 40.65 | 15.48 | 4.61 | *Cerasus yedoensis* (Matsum.) Yu et Li, *M. spectabilis*, *Crataegus pinnatifida, A. persica*, *A. truncatum* Bunge, et al. |
| 17 | Shijingshan district | Biological agent application | 116.22083E | 39.91194N | 68.65 | 16.47 | 4.95 | *Euonymus maackii* Rupr.*, P. tabuliformis, J. regia, Juniperus formosana* Hayata*,* et al. |
| 18 | Shijingshan district | Biological agent application | 116.22222E | 39.91278N | 61.08 | 19.46 | 7.64 | *R. Pseudoacacia, P. tabuliformis, A. persica,* et al. |
| 19 | Pinggu district | Enclosure | 117.13806E | 40.14N | 26.96 | 19.54 | 10.07 | *Populus,* et al. |
| 20 | Pinggu district | Enclosure | 117.13722E | 40.14056N | 27.31 | 21.71 | 9.97 | *Populus,* et al. |
| 21 | Pinggu district | Enclosure | 117.13844E | 40.15806N | 28.71 | 20.27 | 9.28 | *Populus, Fraxinus chinensis* Roxb.*,* et al. |
| 22 | Miyun district | Trap hanging | 116.90528E | 40.3025N | 128.15 | 6.81 | 2.51 | *A. persica,* et al. |
| 23 | Miyun district | Trap hanging | 116.90694E | 40.27361N | 124.67 | 9.17 | 3.18 | *Malus pumila* Mill., *Crataegus pinnatifida,* et al. |
| 24 | Miyun district | Trap hanging | 116.90722E | 40.27222N | 125.28 | 8.12 | 2.56 | *Malus pumila* Mill., *Crataegus pinnatifida,* et al. |
| 25 | Yanqing district | Enclosure | 115.92861E | 40.4625N | 475.31 | 18.74 | 12.50 | *Populus,* et al. |
| 26 | Yanqing district | Enclosure | 115.92778E | 40.46278N | 469.15 | 16.25 | 11.06 | *P.tabuliformis, Populus,* et al. |
| 27 | Yanqing district | Enclosure | 115.92722E | 40.46277N | 447.18 | 18.52 | 12.58 | *Populus,* et al. |
| 28 | Changping district | Chemical control | 116.45528E | 40.12389N | 20.36 | 20.13 | 11.64 | *Populus, G. biloba* L., et al. |
| 29 | Changping district | Chemical control | 116.45444E | 40.12472N | 26.88 | 21.50 | 12.91 | *K. paniculata* , *Populus,* et al. |
| 30 | Changping district | Chemical control | 116.45306E | 40.12583N | 21.7 | 19.68 | 10.33 | *Populus, P. tabuliformis, Salix babylonica,* et al. |
| 31 | Huairou district | Biological agent application | 116.67028E | 40.2754N | 39.07 | 22.64 | 12.12 | *Populus,* et al. |

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| 32 | Huairou district | Biological agent application | 116.67139E | 40.2758N | 38.87 | 23.10 | 12.08 | *Populus,* et al. |
| 33 | Huairou district | Biological agent application | 116.66917E | 40.27556N | 39.78 | 23.00 | 11.22 | *Populus,* et al. |