|  |
| --- |
| friction velocity (m/s) |
| von karman constant (dimensionless) |
| diameter of pollen (m) |
| density of pollen (kg/m3) |
| viscosity of air (m/s) |
| temperature (k) |
| density of air (kg/m3) |
| indoor time (min) |
| outdoor time (min) |
| hand to mouth contact frequency (time) |
| human surface area (m2) |
| human surface area (m2) |
| hand surface ratio (%) |
| female inhalation rate (m3/day) |
| male inhalation rate (m3/day) |
| indoor ventilation rate (s-1) |
| derm loading rate (dimensionless) |
| removal coefficient on the skin (dimesionless) |
|  |

The data are divided into two periods to investigate the trend of pollen concentrations over time. Table 4 shows mean peak values of daily airborne pollen concentrations in periods 1994-2000 and 2001-2010 for nine different climate regions; Table 5 shows the comparison of mean daily airborne pollen concentrations between two periods for nine climate regions. The red values indicate that the species in those regions vary significantly over time.

The data are divided into two periods to investigate the trend of pollen concentrations over time. Table 4 shows mean peak values of daily airborne pollen concentrations in periods 1994-2000 and 2001-2010 for nine different climate regions; Table 5 shows the comparison of mean daily airborne pollen concentrations between two periods for nine climate regions. The red values indicate that the pollen concentrations of species in those regions vary significantly over time, the red values indicate that the concentrations of those species in those regions vary significantly over time (using t-test). Those five species are all found to be vary significantly in Northeast Region. Artemisia, Betula and Gramineae are found to be vary significantly in West Region. Ambrosia are found

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Species** | **Median or Mean** | **Inhalation** | **Dermal Contact** | **Ingestion** | **Total** |
| birch (Betula) | Median | 30 | 0 | 0 | 30 |
|  | Mean | 206(821) | 2(8) | 2(7) | 208 |
| ragweed (Ambrosia) | Median | 28 | 0 | 0 | 28 |
|  | Mean | 86(206) | 1(1) | 0(1) | 87 |
| mugwort (Artemisia) | Median | 20 | 0 | 0 | 20 |
|  | Mean | 85(489) | 0(2) | 0(1) | 85 |
| grass (Gramineae) | Median | 13 | 0 | 0 | 13 |
|  | Mean | 38(86) | 0(1) | 0(1) | 0 |
| oak (Quercus) | Median | 45 | 1 | 0 | 45 |
|  | Mean | 386(1112) | 3(7) | 2(5) | 390 |