



Supplementary Figure 1. Map of sample's location in Gilan and Mazandaran.

**Supplementary Table 1. Geographical characteristics of ecotypes of *Iris pseudacorus*.**

| Sample Code | Location       | Latitude      | Longitude     | Accuracy | Altitude | Tmax (C) | Tmin (C) | tm (C) | rrr24 (mm) | um (%) | sshn |
|-------------|----------------|---------------|---------------|----------|----------|----------|----------|--------|------------|--------|------|
| A           | Khajekari      | 38° 01' 45" N | 48° 55' 05" E | 3 m      | -24 m    | 20.4     | 13.2     | 16.6   | 2.7        | 78.1   | 4.7  |
| B           | Zoume Mahalleh | 38° 06' 32" N | 48° 54' 45" E | 3 m      | -27 m    | 20.4     | 13.2     | 16.6   | 2.7        | 78.1   | 4.7  |
| C           | Moharram Zoume | 38° 14' 3" N  | 48° 53' 34" E | 3 m      | -25 m    | 20.2     | 12.8     | 15.9   | 4.0        | 79.9   | 5.4  |
| E           | Rasht          | 37° 11' 28" N | 49° 38' 02" E | 9 m      | 33 m     | 22.0     | 12.8     | 16.7   | 3.2        | 83.3   | 5.4  |
| F           | Loulman        | 37° 13' 21" N | 49° 49' 56" E | 3 m      | -2 m     | 21.4     | 13.2     | 16.7   | 4.0        | 82.7   | 4.9  |
| G           | Jafarabad      | 37° 16' 44" N | 49° 42' 28" E | 3 m      | 0 m      | 21.4     | 13.2     | 16.7   | 4.0        | 82.7   | 4.9  |
| H           | Some'e sara    | 37° 17' 8" N  | 49° 21' 29" E | 3 m      | -2 m     | 20.7     | 15.0     | 17.3   | 5.3        | 82.8   | 5.5  |
| I           | Shanderman     | 37° 26' 41" N | 49° 06' 53" E | 3 m      | 46 m     | 20.7     | 15.0     | 17.3   | 5.3        | 82.8   | 5.5  |
| J           | Masal          | 37° 22' 10" N | 49° 07' 40" E | 3 m      | 56 m     | 18.7     | 11.7     | 14.5   | 3.7        | 81.6   | 5.0  |
| K           | Safrabasteh    | 37° 21' 4" N  | 49° 57' 18" E | 3 m      | -16 m    | 21.2     | 13.9     | 17.3   | 3.8        | 82.4   | 5.0  |
| L           | Lahijan        | 37° 14' 26" N | 50° 00' 36" E | 3 m      | -16 m    | 21.8     | 12.0     | 16.7   | 3.9        | 81.7   | 5.6  |
| M           | Roudsar        | 37° 06' 39" N | 50° 21' 01" E | 3 m      | -25 m    | 20.5     | 12.9     | 17.2   | 3.2        | 80.8   | 5.7  |
| N           | Ramsar         | 36° 57' 51" N | 50° 35' 04" E | 3 m      | -22 m    | 20.6     | 14.3     | 17.2   | 3.6        | 81.7   | 5.0  |
| O           | Nashtaroud     | 36° 43' 56" N | 51° 03' 13" E | 3 m      | -23 m    | 20.7     | 14.0     | 17.1   | 4.1        | 80.7   | 5.7  |
| P           | Amol           | 36° 29' 43" N | 52° 30' 41" E | 3 m      | 9 m      | 22.6     | 13.4     | 17.3   | 1.9        | 81.2   | 5.3  |
| Q           | Jouybar        | 36° 41' 42" N | 52° 57' 15" E | 3 m      | -20 m    | 23.0     | 13.0     | 17.4   | 1.9        | 78.5   | 6.3  |

rrr24 = 24-hour rainfall / sshn = sunny hours / um = Average relative humidity / tm = Average temperature