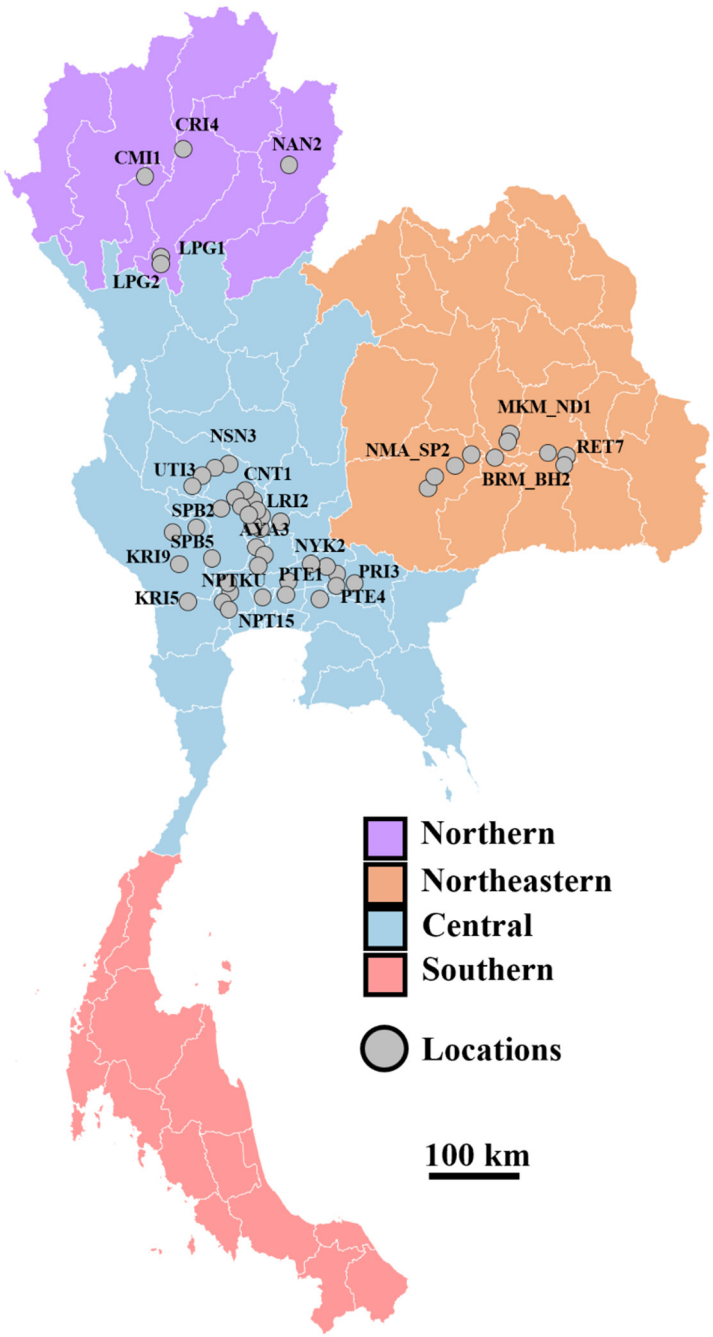



Supplementary Figure S1. Geographic location of the recovered populations of *Hirschmanniella mucronata* in twenty-one provinces of Thailand in this study (for specifications of codes, see Table_S1).

Supplementary Table S1. Details of collection site locations of *Hirschmanniella mucronata* populations.

| Code | GPS | Province | Region |
|---|---|---|---|
| NAN1 | 19°05'20.7"N 100°46'34.2"E | Nan | Northern |
| NAN2 | 19°04'03.0"N 100°46'45.5"E | Nan | Northern |
| NAN3 | 19°06'35.3"N 100°48'11.3"E | Nan | Northern |
| CM1 | 18°51'35.5"N 99°06'27.5"E | Chiang Mai | Northern |
| CRI4 | 19°10'21.9"N 99°32'22.0"E | Chiang Rai | Northern |
| LPG1 | 17°51'41.5"N 99°17'48.7"E | Lampang | Northern |
| LPG2 | 17°51'47.8"N 99°18'05.8"E | Lampang | Northern |
| RET2 | 15°29'58.6"N 104°00'09.4"E | Roi Et | Northeastern |
| RET6 | 15°26'17.0"N 103°58'50.0"E | Roi Et | Northeastern |
| RET7 | 15°37'34"N 103°47'0"E | Roi Et | Northeastern |
| MKM_ND1 | 15°44'38.0"N 103°18'22.7"E | Maha Sarakham | Northeastern |
| MKM_WT3 | 15°48'43.5"N 103°21'19.7"E | Maha Sarakham | Northeastern |
| MKM_PP3 | 15°30'25.4"N 103°10'44.9"E | Maha Sarakham | Northeastern |
| BRM_BH2 | 15°33'55.7"N 102°52'13.0"E | Buriram | Northeastern |
| BRM_PTS3 | 15°33'15.0"N 102°57'37.9"E | Buriram | Northeastern |
| NMA_PT3 | 15°30'33.0"N 102°41'01.6"E | Nakhon Ratchasima | Northeastern |
| NMA_KG1 | 15°21'45.5"N 102°29'29.3"E | Nakhon Ratchasima | Northeastern |
| NMA_SP2 | 14°51'47.7"N 101°48'30.9"E | Nakhon Ratchasima | Northeastern |
| NPT_KU | 14°01'47.2"N 99°58'33.0"E | Nakhon Pathom | Central |
| NPT_12 | 13°55'10.0"N 100°09'25.0"E | Nakhon Pathom | Central |
| NPT_15 | 13°47'00.0"N 100°03'41.0"E | Nakhon Pathom | Central |
| KRI5 | 13°56'46.1"N 99°36'13.9"E | Kanchanaburi | Central |
| KRI9 | 14°21'22.1"N 99°30'41.2"E | Kanchanaburi | Central |
| KRI11 | 14°39'52.4"N 99°26'55.8"E | Kanchanaburi | Central |
| SPB1 | 14°48'20.4"N 99°35'59.4"E | Suphan Buri | Central |
| SPB02 | 14°47'24.5"N 99°44'13.8"E | Suphan Buri | Central |
| SPB05 | 14°28'58.5"N 99°55'53.3"E | Suphan Buri | Central |
| AYA1 | 14°18'53.4"N 100°21'25.9"E | Ayutthaya | Central |
| AYA3 | 14°26'08.7"N 100°22'19.6"E | Ayutthaya | Central |
| AYA5 | 14°36'44.6"N 100°33'06.4"E | Ayutthaya | Central |
| LRI1 | 14°41'37.6"N 100°35'31.7"E | Lopburi | Central |
| LRI2 | 14°49'12.5"N 100°30'05.3"E | Lopburi | Central |
| LRI6 | 15°01'15.7"N 100°29'48.4"E | Lopburi | Central |
| NSN1 | 15°07'20.1"N 100°25'21.8"E | Nakhon Sawan | Central |
| NSN2 | 15°13'24.7"N 100°20'12.6"E | Nakhon Sawan | Central |
| NSN3 | 15°29'31.8"N 100°07'46.3"E | Nakhon Sawan | Central |
| UTI1 | 15°30'49.0"N 99°56'03.5"E | Uthai Thani | Central |
| UTI2 | 15°26'18.7"N 99°52'35.6"E | Uthai Thani | Central |
| UTI3 | 15°17'33.5"N 99°43'58.2"E | Uthai Thani | Central |
| PTE1 | 14°01'49.3"N 100°29'44.3"E | Pathum Thani | Central |
| PTE2 | 14°00'03.8"N 100°45'05.1"E | Pathum Thani | Central |

| | | | |
|---|---|---|---|
| PTE4 | 14°04'30.7"N 100°50'45.3"E | Pathum Thani | Central |
| NYK2 | 14°12'01.4"N 101°03'43.2"E | Nakhon Nayok | Central |
| NYK3 | 14°13'27.5"N 101°09'02.9"E | Nakhon Nayok | Central |
| ATG1 | 14°37'23.0"N 100°27'41.8"E | Ang Thong | Central |
| ATG2 | 14°27'30.4"N 100°28'05.7"E | Ang Thong | Central |
| ATG3 | 14°31'32.5"N 100°13'22.3"E | Ang Thong | Central |
| CNT1 | 15°07'20.1"N 100°13'37.8"E | Chainat | Central |
| CNT2 | 15°05'09.2"N 100°16'50.4"E | Chainat | Central |
| CNT3 | 14°57'46.2"N 100°01'58.2"E | Chainat | Central |
| SBR1 | 14°58'12.1"N 100°19'19.7"E | Sing Buri | Central |
| SBR2 | 14°54'27.1"N 100°22'19.8"E | Sing Buri | Central |
| SBR3 | 14°44'52.1"N 100°26'27.0"E | Sing Buri | Central |
| PRI1 | 14°06'00.3"N 101°19'22.5"E | Prachinburi | Central |
| PRI2 | 14°03'26.8"N 101°30'46.9"E | Prachinburi | Central |
| PRI3 | 14°02'59.7"N 101°15'36.9"E | Prachinburi | Central |
| CCO1 | 13°58'22.1"N 101°05'52.4"E | Chachoengsao | Central |