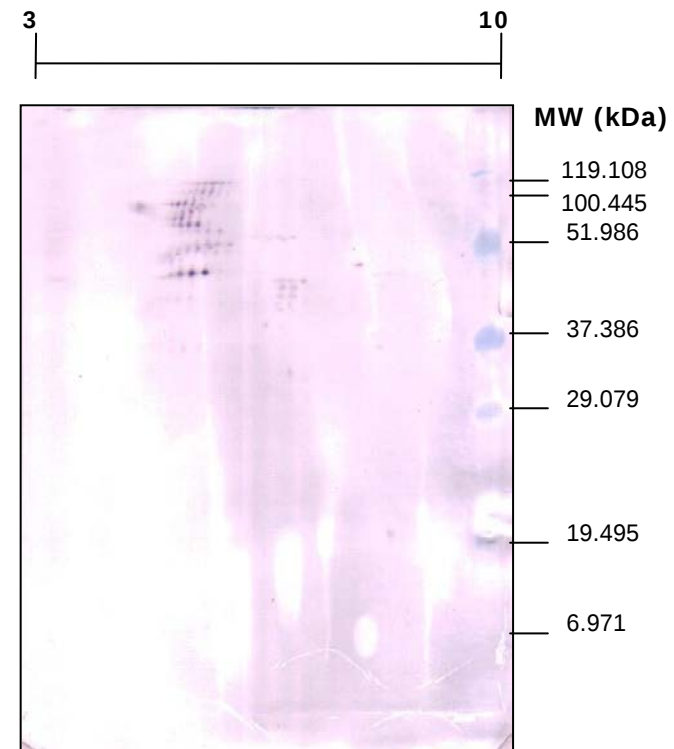
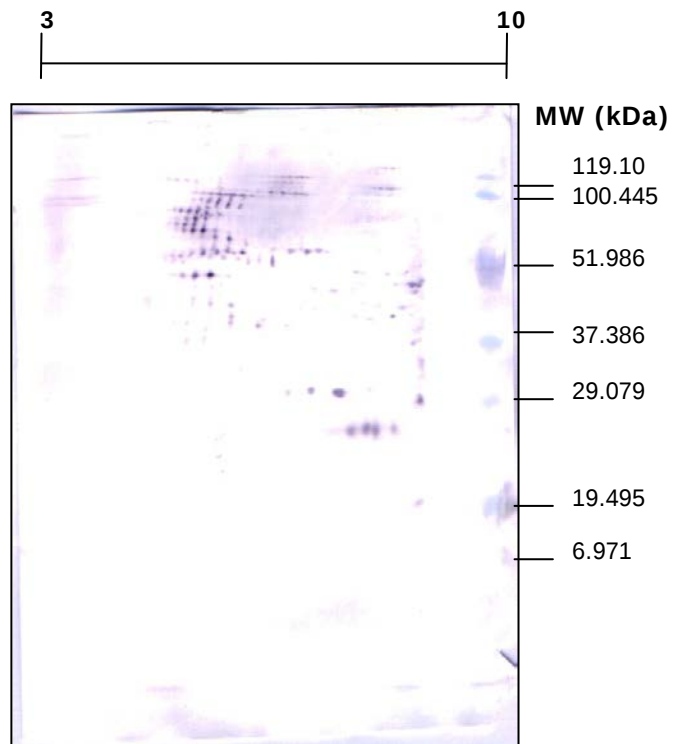
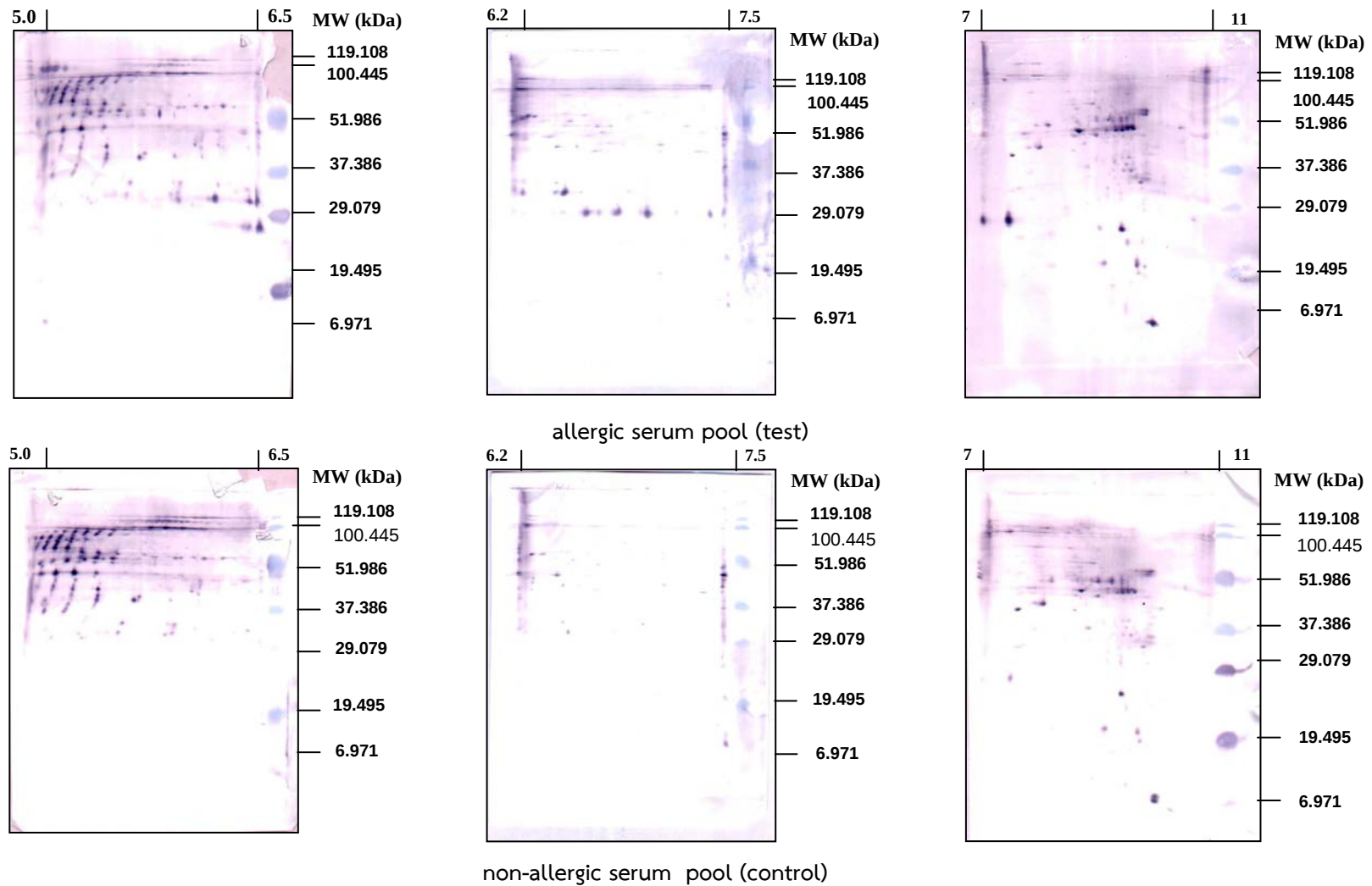
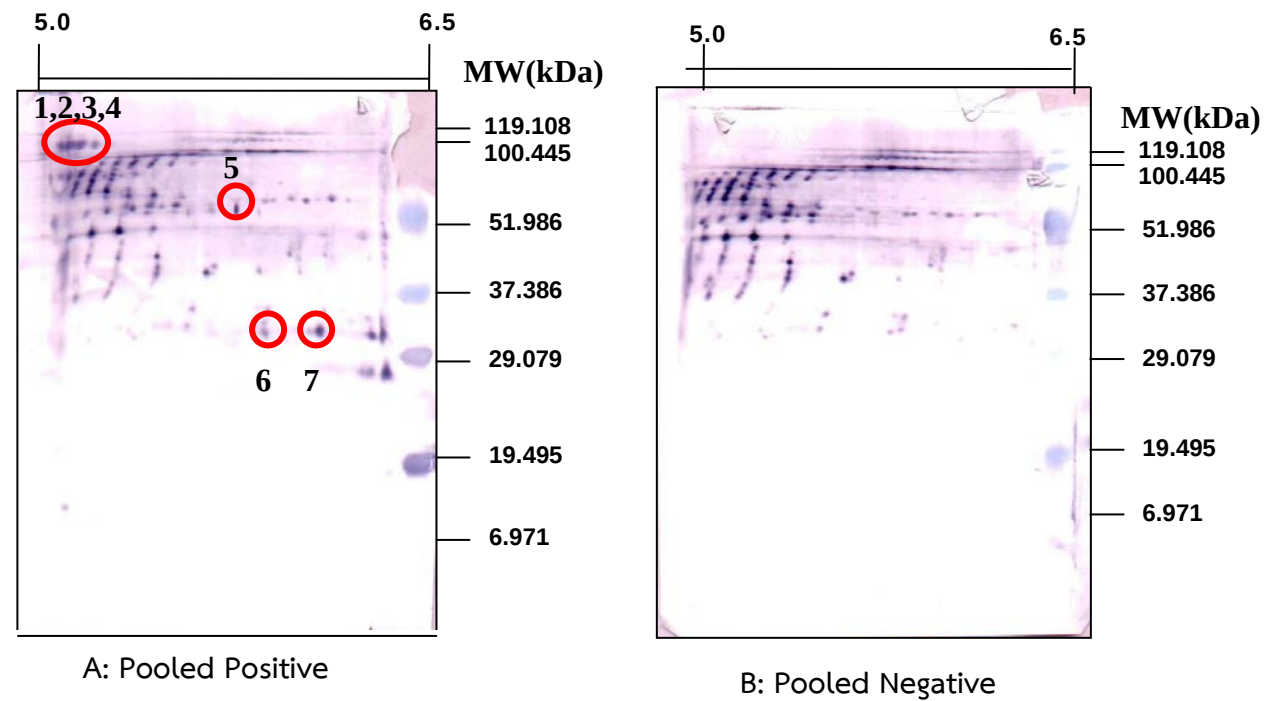




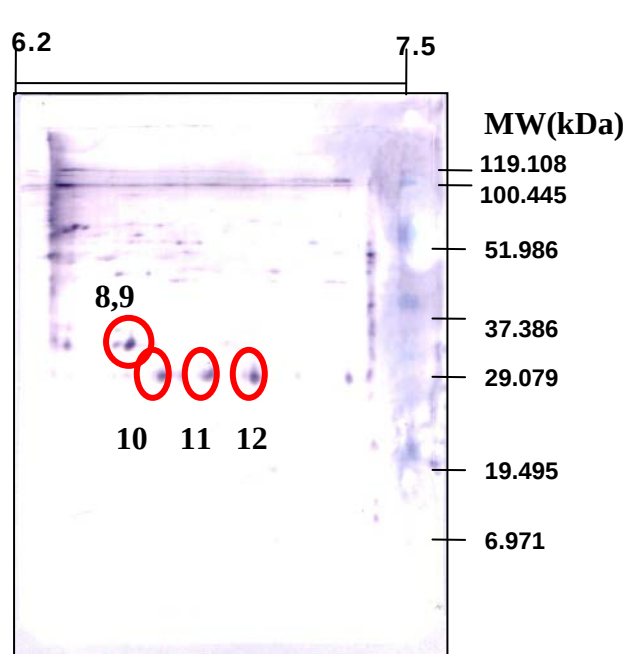
รูปที่ 3.10 Two dimensional immunoblot analysis from crude extract of *D. pteronyssinus* at the pH 3-10, NL; the blot probed with the allergic serum pool (A) compare with non-allergic serum pool (B).



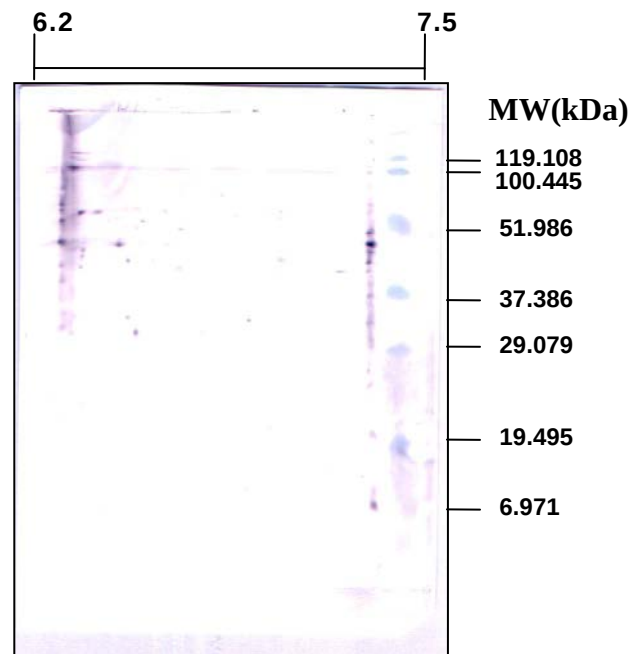
รูปที่ 3.11 Two dimensional immunoblot analysis for identification of main *D. pteronyssinus* allergens in various pH ranges probed with allergic serum pool compare with non-allergic serum pool.



รูปที่ 3.12 Two dimensional immunoblot analysis from crude extract of *D. pteronyssinus* at the pH 5.0-6.5 the blot probed with the allergic serum pool (A) compare with non-allergic serum pool (B). Circles and the indicated numbers in A are protein spots which were subjected to LC/MS.

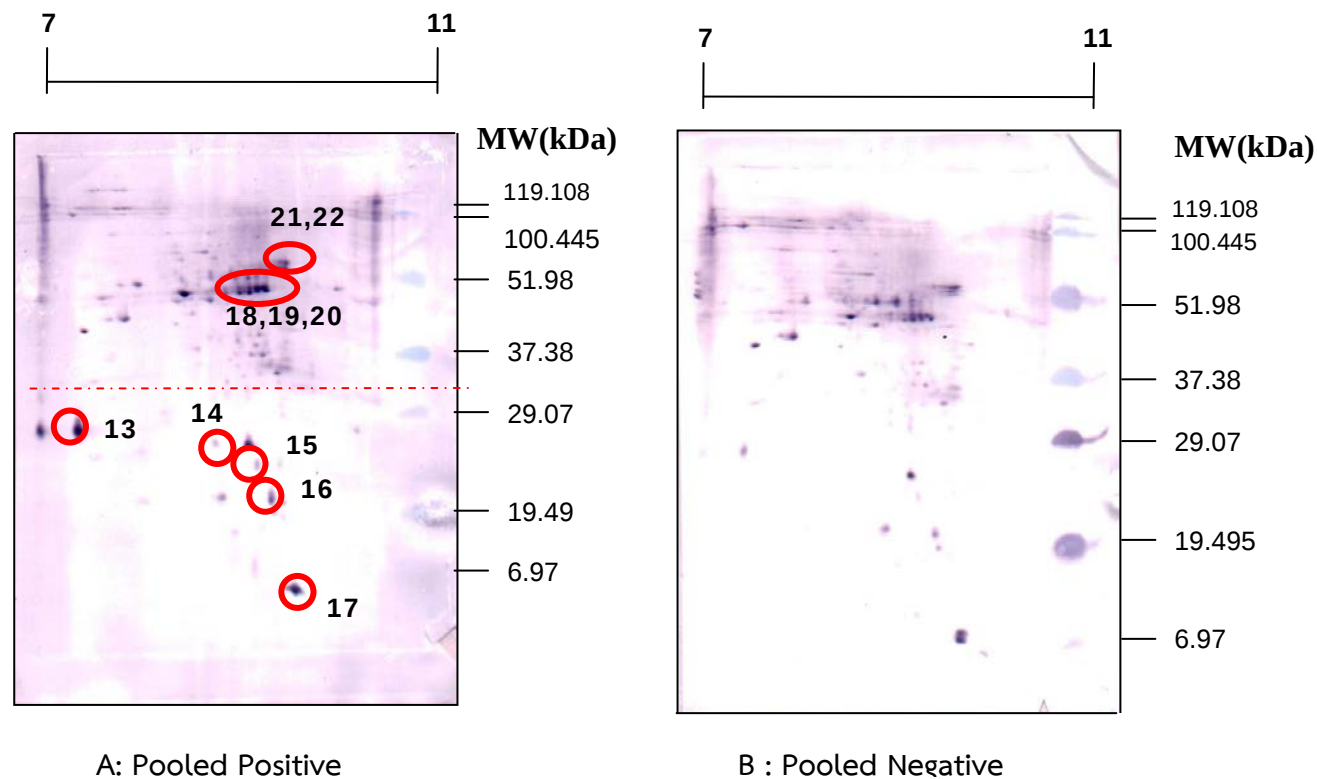


A: Pooled Positive



B : Pooled Negative

รูปที่ 3.13 Two dimensional immunoblot analysis from crude extract of *D. pteronyssinus* at the pH 6.2-7.5; the blot probed with the allergic serum pool (A) compare with non-allergic serum pool (B). Circles and the indicated numbers in A are protein spots which were subjected to LC/MS.

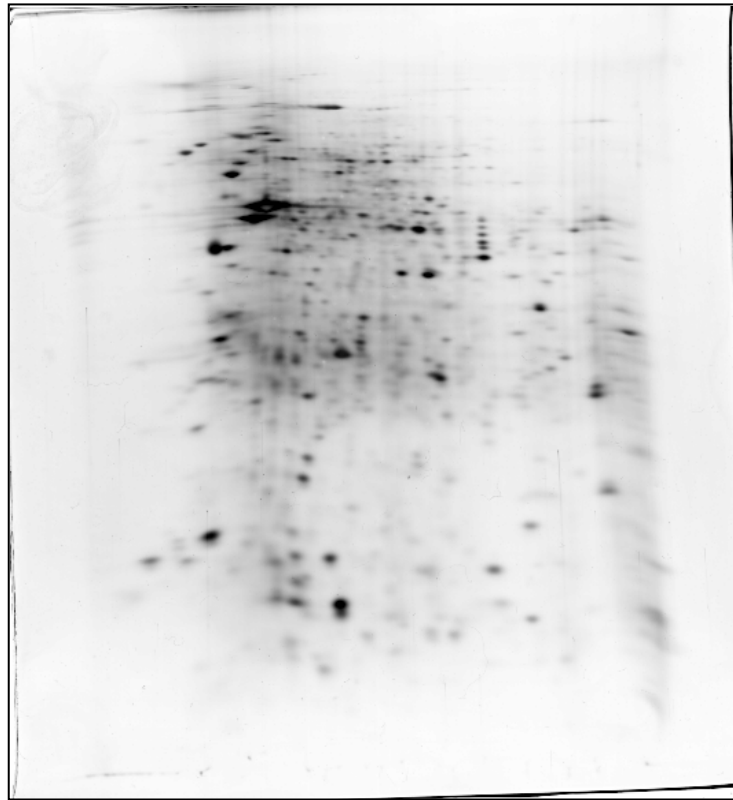


รูปที่ 3.14 Two dimensional immunoblot analysis from crude extract of *D. pteronyssinus* at the pH 7-11; the blot probed with the allergic serum pool (A) compare with the non-allergic serum pool (B) Circles and the indicated numbers in A are protein spots which were subjected to LC/MS.

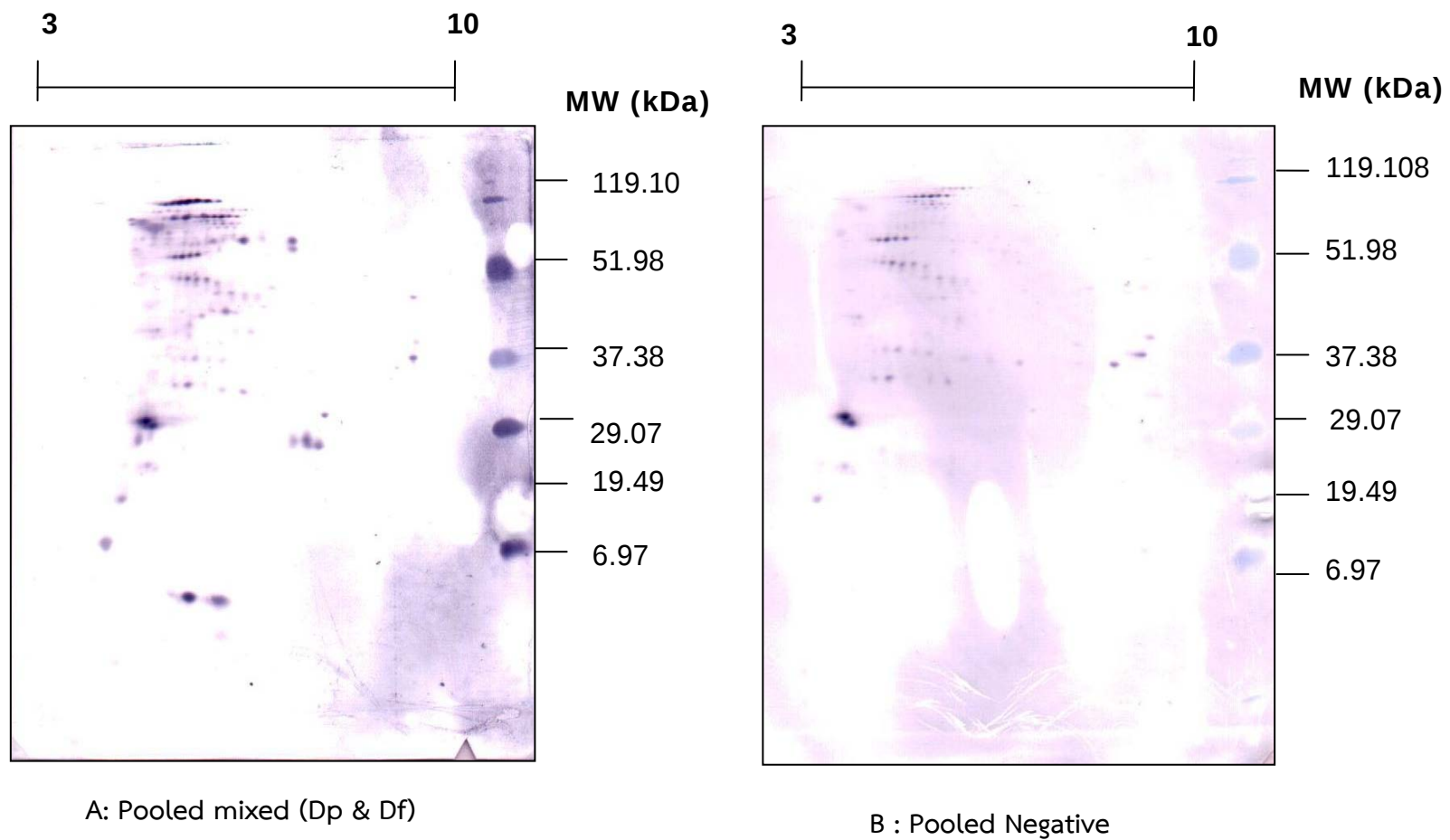
ตารางที่ 3.4 The molecular mass and *pI* of the IgE-reactive proteins spots from the 2DE-gel after analyzing by mass spectrometry with the protein

| Spot no. | Homologue protein                                                                                                                          | <i>pI</i> | Mw (kDa) |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|
| 1        | Myosin heavy chain                                                                                                                         | 5.86      | 224.42   |
| 2        | Paramyosin allergen [ <i>Blomia tropicalis</i> ]                                                                                           | 5.65      | 102.02   |
| 3        | Paramyosin allergen [ <i>B. tropicalis</i> ]                                                                                               | 5.65      | 102.02   |
| 4        | Paramyosin allergen [ <i>B. tropicalis</i> ]                                                                                               | 5.65      | 102.02   |
| 5        | Group 14 allergen protein [ <i>D. pteronyssinus</i> ]                                                                                      | 8.0       | 190.66   |
| 6        | A Chain A, Crystal Structure of the major house dust mite allergen Der P 1                                                                 | 5.85      | 353.83   |
| 7        | Glutathione transferase mu class Dp7019C10 [ <i>D. p</i> ]                                                                                 | 8.51      | 256.69   |
| 8        | glutathione transferase delta-like Dp7018E11 [ <i>D. p</i> ]                                                                               | 6.66      | 266.52   |
|          | glutathione transferase delta-like Dp7018E11 [ <i>D. p</i> ] - new                                                                         |           |          |
| 9        | glutathione transferase delta-like Dp7018E11 [ <i>D. p</i> ]<br>beta-galactosidase [ <i>Oryza sativa</i> (japonica cultivar-group)]<br>new | 6.66      | 266.52   |
| 10       | Triosephosphate Isomerase (E.C.5.3.1.1)<br>Mutant with 15 Residues (68 - 82) Replaced By 8 Residues                                        |           |          |
| 11       | 0905238A keratin subunit, epidermal                                                                                                        |           |          |
| 12       | B Chain B, Porcine E-Trypsin (E.C.3.4.21.4)                                                                                                |           |          |
| 13       | beta-galactosidase [ <i>Oryza sativa</i> (japonica cultivar-group)]                                                                        |           |          |
| 14       | B Chain B, Porcine E-Trypsin (E.C.3.4.21.4)                                                                                                |           |          |
| 15       | molecular chaperone DnaK [ <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Choleraesuis</i> str. SC-B67] keratin-10           |           |          |
| 16       | K1C10_HUMAN Keratin, type I cytoskeletal 10<br>(Cytokeratin-10) (CK-10) (Keratin-10) (K10)                                                 |           |          |
| 17       | cytokeratin 9 [ <i>Homo sapiens</i> ]                                                                                                      |           |          |
| 18       | K1C10_HUMAN Keratin, type I cytoskeletal 10<br>(Cytokeratin-10) (CK-10) (Keratin-10) (K10)                                                 |           |          |
| 19       | B Chain B, Porcine E-Trypsin (E.C.3.4.21.4)                                                                                                |           |          |
| 20       | keratin-10                                                                                                                                 |           |          |
| 21       | PREDICTED: similar to keratin 9 [ <i>Pan troglodytes</i> ]                                                                                 |           |          |
| 22       | elongation factor-1alpha [ <i>Sodreana sodreana</i> ]                                                                                      |           |          |

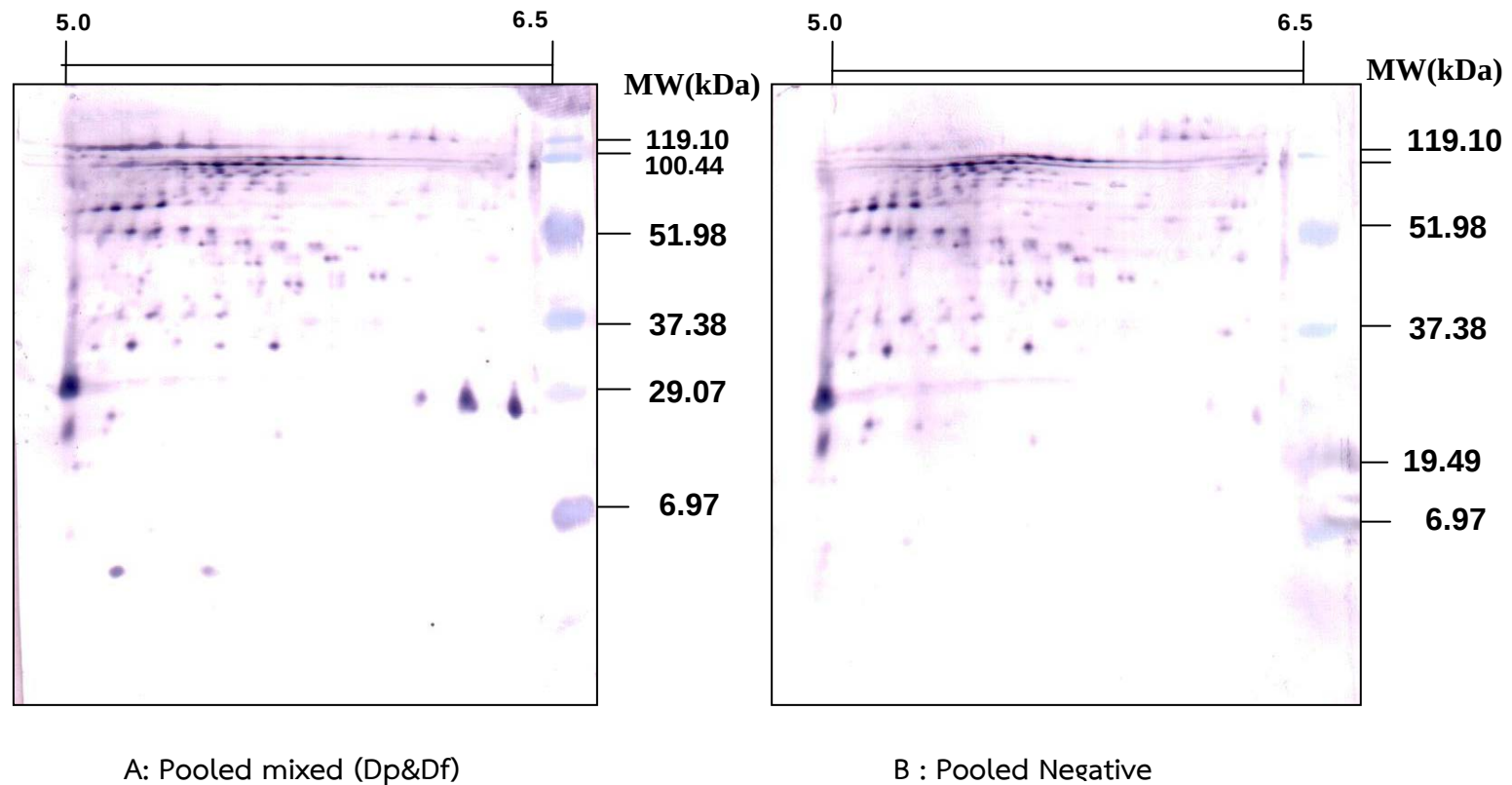
database.



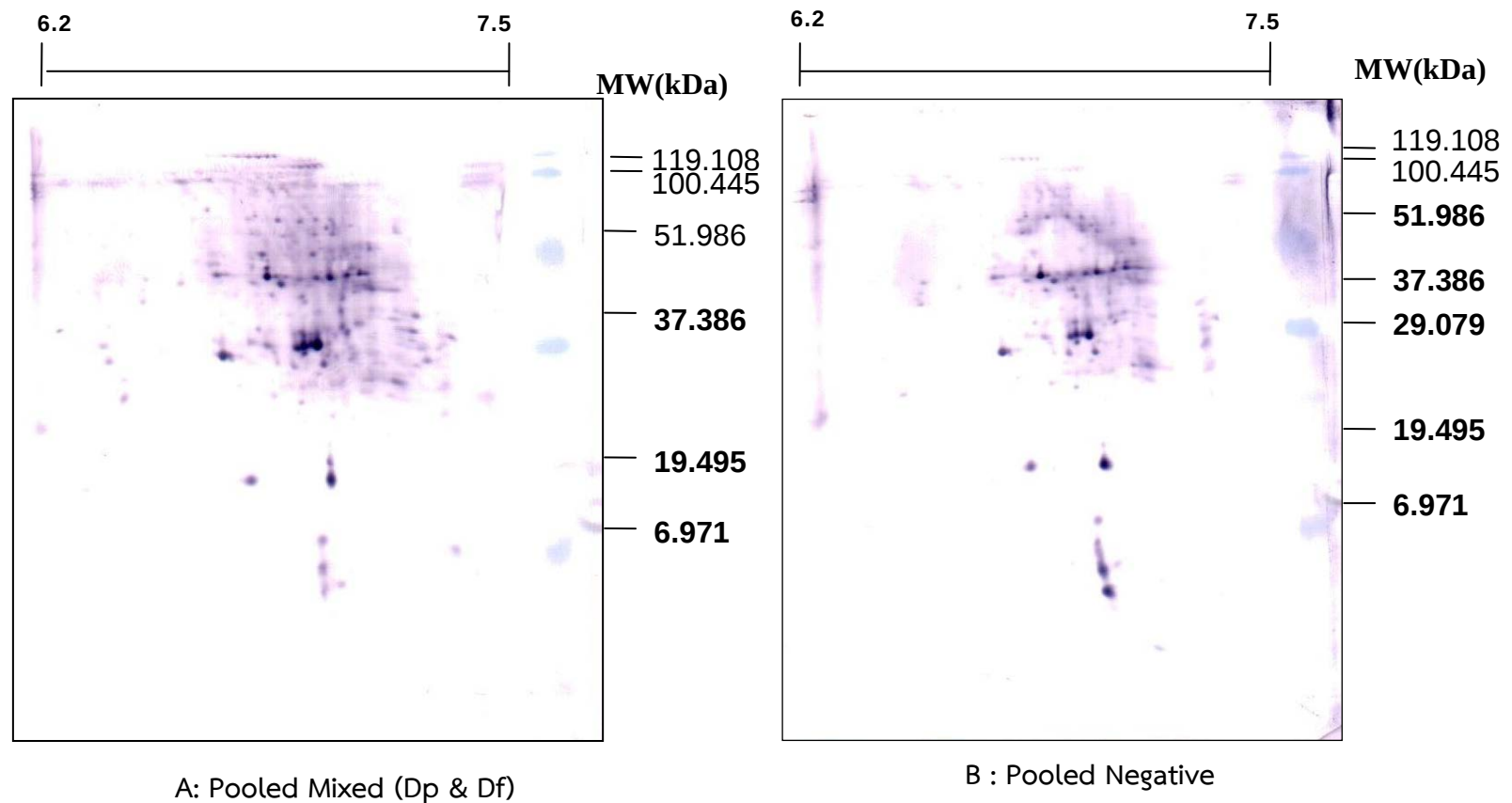
รูปที่ 3.15 2-DE maps of proteins from crude extract of *Dermatophacoides farinae* stained by silver



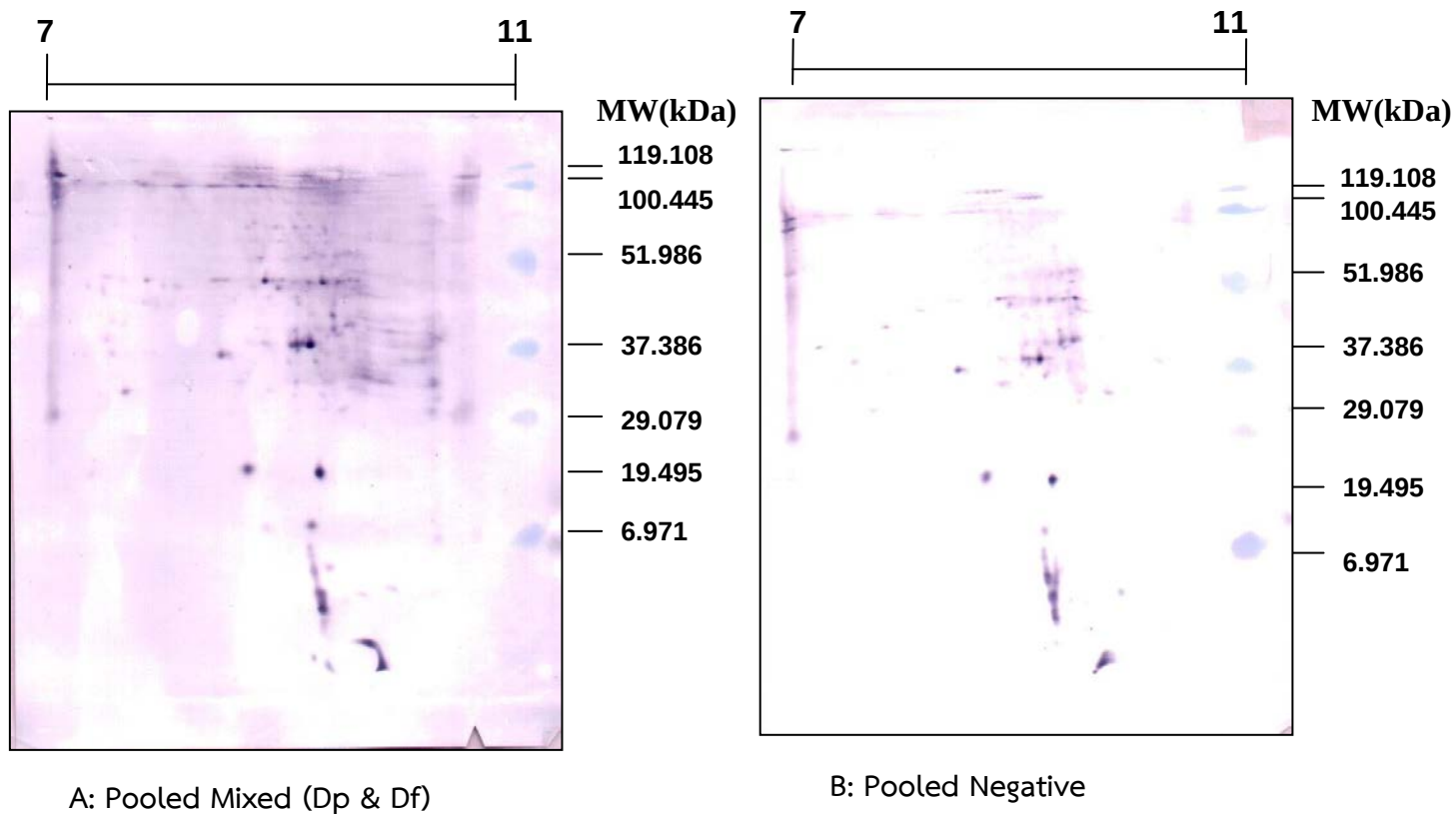
รูปที่ 3.16 Two dimensional immunoblot analysis from crude extract of *D. farinae* at the pH 3-10, NL; the blot probed with the allergic serum pool (A) compare with non-allergic serum pool (B).



รูปที่ 3.17 Two dimensional immunoblot analysis from crude extract of *D. farinae* at the pH 5.0-6.5 the blot probed with the allergic serum pool (A) compare with non-allergic serum pool (B).



รูปที่ 3.18 Two dimensional immunoblot analysis from crude extract of *D. farinae* at the pH 6.2-7.5 the blot probed with the allergic serum pool (A) compare with non-allergic serum pool (B).



รูปที่ 3.19 Two dimensional immunoblot analysis from crude extract of *D. farinae* at the pH 7.0-11 the blot probed with the allergic serum pool (A) compare with non-allergic serum pool (B).

