CLAIMS

1. A method for constructing a standard decoction characteristic spectrum of *Woodwardia unigemmata* and carbonized *Woodwardia unigemmata* decoction pieces, standard decoctions, and formula granules, comprising:

A) dissolving a carbonized *Woodwardia unigemmata* raw material in a solvent to obtain a test solution;

B) subjecting the test solution to high-performance liquid chromatography to obtain a UPLC characteristic spectrum of the carbonized *Woodwardia unigemmata* raw material;

wherein chromatographic conditions of the high-performance liquid chromatography are: a C18 chromatographic column; acetonitrile as mobile phase A; 0.1% formic acid as mobile phase B; and gradient elution.

2. The method according to claim 1, wherein the method further comprises preparing a reference solution: respectively taking protocatechuic acid and 5-hydroxymethylfurfural, boiling in water, then filtering, and dissolving filter residue with 70% methanol to obtain the reference solution; wherein a concentration of the reference substance solution is 20 μg/mL;

determining the reference substance solution by high-performance liquid chromatography to obtain a chromatogram of the reference substance; and based on the chromatogram of the reference substance, qualitatively determining the components in the UPLC characteristic spectrum of carbonized *Woodwardia unigemmata* decoction pieces, standard decoctions, and formula granules.

3. The method according to claim 1, wherein the gradient elution is specifically as follows:

0-8 min, mobile phase A: 1%, mobile phase B: 99%;

8-18 min, mobile phase A: 1%-15%, mobile phase B: 99%-85%;

18-35 min, mobile phase A: 15%-25%, mobile phase B: 85%-75%;

35-50 min, mobile phase A: 25%-26%, mobile phase B: 75%-74%.

4. The method according to claim 3, wherein the chromatographic column is a C18 column with a specification of 1.6 μm, 2.1 × 150 mm, and a column temperature is 35 °C.

5. The method according to claim 4, wherein a flow rate of the mobile phase is 0.3 mL/min, a detection wavelength is 250 nm, and an injection volume is 1 μL.

6. The method according to claim 1, wherein a Traditional Chinese Medicine Chromatographic Fingerprint Similarity Evaluation System is used to evaluate similarity of the UPLC characteristic spectrum of carbonized *Woodwardia unigemmata* decoction pieces, standard decoctions, and formula granules, to obtain a UPLC standard characteristic spectrum composed of 13 characteristic peaks, wherein Peak 1 is hydroxymethylfurfural and Peak 3 is protocatechuic acid.

7. The method according to claim 6, wherein, in the characteristic spectrum of the carbonized *Woodwardia unigemmata* standard decoctions, protocatechuic acid is used as a reference peak S, relative retention times of the characteristic peaks relative to the S peak are calculated, and the relative retention times fall within ±10% of specified values, wherein the specified values are respectively: 0.77 (Peak 1), 0.87 (Peak 2), 1.51 (Peak 4), 2.75 (Peak 5), 2.81 (Peak 6), 3.34 (Peak 7), 3.43 (Peak 8), 3.50 (Peak 9), 3.67 (Peak 10), 4.57 (Peak 11), 4.72 (Peak 12), and 4.77 (Peak 13);

wherein in the characteristic spectrum of carbonized *Woodwardia unigemmata* decoction pieces, protocatechuic acid is used as the reference peak S, relative retention times of the characteristic peaks relative to the S peak are calculated, and the relative retention times falling within ±10% of specified values, wherein the specified values are respectively: 0.77 (Peak 1), 0.86 (Peak 2), 1.48 (Peak 4), 2.67 (Peak 5), 2.72 (Peak 6), 3.24 (Peak 7), 3.32 (Peak 8), 3.39 (Peak 9), 3.55 (Peak 10), 4.44 (Peak 11), 4.57 (Peak 12), and 4.61 (Peak 13);

wherein in the characteristic spectrum of carbonized *Woodwardia unigemmata* formula granules, protocatechuic acid is used as the reference peak S, relative retention times of the characteristic peaks relative to the S peak are calculated, and relative retention times fall within ±10% of specified values, wherein the specified values are respectively: 0.77 (Peak 1), 0.87 (Peak 2), 1.50 (Peak 4), 2.72 (Peak 5), 2.77 (Peak 6), 3.30 (Peak 7), 3.39 (Peak 8), 3.46 (Peak 9), 3.62 (Peak 10), 4.53 (Peak 11), 4.65 (Peak 12), and 4.70 (Peak 13).

8. The method according to claim 1, wherein in step A), the solvent is 70% methanol; the extraction method is water boiling followed by ultrasonic extraction; an ultrasonic power is 600 W; a frequency is 40 kHz; and an extraction duration is 15-45 min.

9. The method according to claim 8, wherein in step A), a mass (g) of the carbonized *Woodwardia unigemmata* raw material to a volume (mL) of the solvent is in a ratio of (0.1-1):(10-50).

10. The method according to claim 1, wherein in step A), the carbonized *Woodwardia unigemmata* raw material is carbonized *Woodwardia unigemmata* decoction pieces, standard decoctions, or formula granules.