



**International RINP, Inc.**

**Analytical Services in Foods, Natural Products,  
Nutrition Supplements, Cosmetics and Pharmaceuticals**

**Committed to Tested Products at Competitive Prices**

## Price List (2008)

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**Turnaround times: 3-5 working days**

**If your product is not on this list, please call us for pricing.**

### Price List (2008) (International RINP)

#### Botanical Testing by HPLC Method

| <b>Common Name</b>   | <b>Chemical Marker</b>                       | <b>Cost 1<sup>st</sup> sample</b> | <b>Cost 2<sup>nd</sup> sample</b> | <b>Assay Method</b> |
|----------------------|--|-----------------------------------|-----------------------------------|---------------------|
| Aloe barbadensis     | Aloin  | \$200                             | \$180                             | HPLC                |
| Andrographis         | Andrographolide                              | \$200                             | \$180                             | HPLC                |
| Paniculata           |  |                                   |                                   |                     |
| Aristolochiae        | Aristolochic acid                            | \$200                             | \$180                             | HPLC                |
| Artichoke            | Cyanarin                                     | \$200                             | \$180                             | HPLC                |
| Apple Vinegar        | Acetic acid                                  | \$200                             | \$180                             | HPLC                |
| Apricot Kernel       | Amygdalin                                    | \$200                             | \$180                             | HPLC                |
| Astragalus           | 4'-hydroxy-3'-methoxy Isoflavone-7-sug(GHIF) | \$200                             | \$180                             | HPLC                |
| Angelica Root        | Ligustilide                                  | \$200                             | \$180                             | HPLC                |
| Atractylodis         | Atractylenolide                              | \$200                             | \$180                             | HPLC                |
| Banaba Leaf          | Corosolic Acid                               | \$200                             | \$180                             | HPLC                |
| Barberry             | Alkaloid as Berberine                        | \$200                             | \$180                             | HPLC                |
| Bilberry             | Anthocyanidins, qualitative ID               | \$200                             | \$180                             | HPLC                |
| Bilberry             | Benzoic Acid                                 | \$200                             | \$180                             | HPLC                |
| Bilberry             | Qualitative & quantitative as one order      | \$200                             | \$180                             | HPLC                |
| Black Cohosh         | Triterpene Glycoside                         | \$200                             | \$180                             | HPLC                |
| Black Pepper         | Piperine                                     | \$200                             | \$180                             | HPLC                |
| Blueberry            | Ptenolstilbene                               | \$200                             | \$180                             | HPLC                |
| Bitter Orange        | Zhi-Shi, Synepherine                         | \$200                             | \$180                             | HPLC                |
| Boldo                | Boldine                                      | \$200                             | \$180                             | HPLC                |
| Boswella             | β-Boswellic Acid                             | \$200                             | \$180                             | HPLC                |
| Broccoli             | Glucosinolate                                | \$200                             | \$180                             | HPLC                |
| Broccoli             | Sulforaphane                                 | \$200                             | \$180                             | HPLC                |
| Butcher's Broom      | Ruscogenins                                  | \$200                             | \$180                             | HPLC                |
| Cascara Sagrada      | Total anthraquinone as cascarioside A        | \$200                             | \$180                             | HPLC                |
| Chaste Tree Berry    | Agnuside                                     | \$200                             | \$180                             | HPLC                |
| Chaste Tree Berry    | Agucubine                                    | \$200                             | \$180                             | HPLC                |
| Chaste Tree Berry    | Casticin                                     | \$200                             | \$180                             | HPLC                |
| Chili Pepper         | Scoville heat unit or capsaicin              | \$200                             | \$180                             | HPLC                |
| Citrus Bioflavonoids | Hesperidin & narigin                         | \$200                             | \$180                             | HPLC                |
| Citrus reticulata    | Nobiletin, tangeretin, hesperidin            | \$200                             | \$180                             | HPLC                |
| Coptis (Huang-Lian)  | Berberine                                    | \$200                             | \$180                             | HPLC                |
| Cranberry            | Quinic, Malic, Citric and Shikimic Acids     | \$200                             | \$180                             | HPLC                |
| Cridium              | Osthole                                      | \$200                             | \$180                             | HPLC                |
| Crocus               | Crocetin                                     | \$200                             | \$180                             | HPLC                |
| Chamomile            | Apigenin-7-glucoside                         | \$200                             | \$180                             | HPLC                |
| Calendula (Marigold) | Lutein/Zeaxanthin                            | \$200                             | \$180                             | HPLC                |
| Cascara Sagrada      | Cascarioside/Anthronquinon                   | \$200                             | \$180                             | HPLC                |
| Cordyceps            | Cordycepic acid                              | \$200                             | \$180                             | HPLC                |
| Coryceps             | Adenosine                                    | \$200                             | \$180                             | HPLC                |
| Corydalis (Yanhusu)  | Dehydrocorydaline                            | \$200                             | \$180                             | HPLC                |
| Devil's Claw         | Harpagoside                                  | \$200                             | \$180                             | HPLC                |
| Dong Quai            | Ligustilide                                  | \$200                             | \$180                             | HPLC                |
| Dwarf Lilyturf       | Ruscogenin                                   | \$200                             | \$180                             | HPLC                |
| Echinacea            | Echinacoside, cichoric, etc.                 | \$200                             | \$180                             | HPLC                |
| Epimedium            | Icariin (a flavanoid)                        | \$200                             | \$180                             | HPLC                |
| Evodia               | Evodamine                                    | \$200                             | \$180                             | HPLC                |
| Eucommiae            | Chlorogenic Acid                             | \$200                             | \$180                             | HPLC                |
| Ellagic Acid         | Ellagic acid                                 | \$200                             | \$180                             | HPLC                |

| Botanical Testing by HPLC Method |                                       |                             |                             |              |
|----------------------------------|---------------------------------------|-----------------------------|-----------------------------|--------------|
| Common Name                      | Chemical Marker                       | Cost 1 <sup>st</sup> sample | Cost 2 <sup>nd</sup> sample | Assay Method |
| Feverfew                         | Parthenolide                          | \$200                       | \$180                       | HPLC         |
| Fo-Ti (He-Shou-Wu)               | Emodin etc.                           | \$200                       | \$180                       | HPLC         |
| Forsythia                        | Forskoline                            | \$200                       | \$180                       | HPLC         |
| Garcinia                         | Hydroxycitric acid                    | \$200                       | \$180                       | HPLC         |
| Ginger                           | Gingerols & shogals                   | \$200                       | \$180                       | HPLC         |
| Ginkgo Biloba                    | Ginkgoflavone Glycosides              | \$200                       | \$180                       | HPLC         |
| Ginkgo Biloba                    | Ginkgoterpenoids                      | \$200                       | \$180                       | HPLC         |
| Ginkgo Biloba                    | 3 assays as 1 order                   | \$200                       | \$180                       | HPLC         |
| Ginseng (Asian, American)        | Total Ginsenosides, quantitation      | \$200                       | \$180                       | HPLC         |
| Ginseng                          | Species substantiation & quantitation | \$200                       | \$180                       | HPLC         |
| Goldenseal                       | Hydrastine & Berberine                | \$200                       | \$180                       | HPLC         |
| Gotu Kola                        | Terpene as Asiatic acid               | \$200                       | \$180                       | HPLC         |
| Green Tea                        | Epicatechin etc., 8 markers           | \$200                       | \$180                       | HPLC         |
| Green Tea                        | L-Theanine                            | \$200                       | \$180                       | HPLC         |
| Guarana Seed                     | Caffeine, theobromide, etc.           | \$200                       | \$180                       | HPLC         |
| Guggul                           | Guggul Sterones E&Z                   | \$200                       | \$180                       | HPLC         |
| Hawthorn                         | Vitexin-2-rahmnoside, etc.            | \$200                       | \$180                       | HPLC         |
| Horse Chestnut                   | β-Ascin                               | \$200                       | \$180                       | HPLC         |
| Horsetail                        | Acotinic Acid E&Z                     | \$200                       | \$180                       | HPLC         |
| Horsetail                        | Silicylic Acid                        | \$200                       | \$180                       | HPLC         |
| Holy Basil                       | Ursolic Acid                          | \$200                       | \$180                       | HPLC         |
| Kola Nut                         | Caffeine                              | \$200                       | \$180                       | HPLC         |
| Kudzu                            | Isoflavones, puerarin                 | \$200                       | \$180                       | HPLC         |
| Lemon Bioflavonoids              | Hesperidins, narigin, etc             | \$200                       | \$180                       | HPLC         |
| Licorice                         | Glycyrrhizin                          | \$200                       | \$180                       | HPLC         |
| Lonucera japonica                | Chlorogenic acid                      | \$200                       | \$180                       | HPLC         |
| Lonucera japonica                | luteolin                              | \$200                       | \$180                       | HPLC         |
| Lovage Root                      | Ligustilide                           | \$200                       | \$180                       | HPLC         |
| Ma Huang                         | Total Ephedrine                       | \$200                       | \$180                       | HPLC         |
| Mango                            | Mangiferin                            | \$200                       | \$180                       | HPLC         |
| Meadow Sweet                     | Flavonoids                            | \$200                       | \$180                       | HPLC         |
| Milk Thistle                     | Silymarin                             | \$200                       | \$180                       | HPLC         |
| Nettle                           | β-Sitosterol                          | \$200                       | \$180                       | HPLC         |
| Nettle                           | Scolopletin                           | \$200                       | \$180                       | HPLC         |
| Noto Ginseng                     | Ginsenosides                          | \$200                       | \$180                       | HPLC         |
| Oregon Grape Root                | Berberine                             | \$200                       | \$180                       | HPLC         |
| Olive Leaf                       | Oleuropein                            | \$200                       | \$180                       | HPLC         |
| Olive Leaf                       | Apigenin, luteolin, rutin             | \$200                       | \$180                       | HPLC         |
| Passion Flower                   | Iso-vitexin                           | \$200                       | \$180                       | HPLC         |
| Pau d'arco                       | Lapachol                              | \$200                       | \$180                       | HPLC         |
| Polygonum                        | Emodin & polydatin                    | \$200                       | \$180                       | HPLC         |
| Polygonum                        | resveratrol                           | \$200                       | \$180                       | HPLC         |
| Pomegranate                      | Ellagic Acid                          | \$200                       | \$180                       | HPLC         |
| Pomegranate                      | punicalagin                           | \$200                       | \$180                       | HPLC         |
| Pueraria lobata                  | Daidzein, puerarin                    | \$200                       | \$180                       | HPLC         |
| Rauwolfia                        | Reserpine                             | \$200                       | \$180                       | HPLC         |
| Red Clover                       | Isoflavones, biochanins               | \$200                       | \$180                       | HPLC         |
| Red yeast                        | mevinolin                             | \$200                       | \$180                       | HPLC         |
| Rheum palmatum                   | Emodin, aloemodin, rhein              | \$200                       | \$180                       | HPLC         |
| Rhubarb Root                     | Anthronquinon as Emodin               | \$200                       | \$180                       | HPLC         |
| Rhodiola (Tibet)                 | Salidroside                           | \$200                       | \$180                       | HPLC         |
| Rosemary Extract                 | Rosmaric acid, carnosic acid          | \$200                       | \$180                       | HPLC         |

| Botanical Testing by HPLC Method |                             |                             |                             |              |
|----------------------------------|-----------------------------|-----------------------------|-----------------------------|--------------|
| Common Name                      | Chemical Marker             | Cost 1 <sup>st</sup> sample | Cost 2 <sup>nd</sup> sample | Assay Method |
| Saw Palmetto                     | Phytosterols                | \$200                       | \$180                       | HPLC         |
| Scutellaria (Huang-Quin)         | Baicalin, baicalein         | \$200                       | \$180                       | HPLC         |
| Senna                            | Sennosides                  | \$200                       | \$180                       | HPLC         |
| Sesame seed                      | Sesamin, sesamol            | \$200                       | \$180                       | HPLC         |
| Schisandra                       | Schisandrins                | \$200                       | \$180                       | HPLC         |
| Siberian Ginseng                 | Eleutheroside B & E         | \$200                       | \$180                       | HPLC         |
| Sida Cordifolia                  | Ephedrine alkaloids         | \$200                       | \$180                       | HPLC         |
| Soy Extract                      | Isoflavones                 | \$200                       | \$180                       | HPLC         |
| Stevia                           | Stevioside                  | \$200                       | \$180                       | HPLC         |
| St. John's Wort                  | Hyperforin                  | \$200                       | \$180                       | HPLC         |
| Swertia japonica                 | swertiamarin                | \$200                       | \$180                       | HPLC         |
| Tribulus Terrestris              | Protodiocin                 | \$200                       | \$180                       | HPLC         |
| Turmeric                         | Curcumin                    | \$200                       | \$180                       | HPLC         |
| Tomato Powder                    | Lycopene                    | \$200                       | \$180                       | HPLC         |
| Valerian                         | Total Valerenic Acids       | \$200                       | \$180                       | HPLC         |
| Uva Ursi                         | Hydroquinone & Arbutin      | \$200                       | \$180                       | HPLC         |
| Willow Bark                      | Salicin                     | \$200                       | \$180                       | HPLC         |
| Withania somnifera               | Withanolide A               | \$200                       | \$180                       | HPLC         |
| Yellowdock                       | Anthronquinon as emodin     | \$200                       | \$180                       | HPLC         |
| Yerba Mate                       | Caffeine                    | \$200                       | \$180                       | HPLC         |
| Yohimbe                          | Yohimbine & Total Alkaloids | \$200                       | \$180                       | HPLC         |
| Zhi-shi                          | Synepherine                 | \$200                       | \$180                       | HPLC         |

| Identification of Traditional Chinese Medicines (TCMs) by HPTLC or TLC Method |                             |                             |                       |
|---|-----------------------------|-----------------------------|-----------------------|
| Latin Name (Chinese Name)   | Cost 1 <sup>st</sup> sample | Cost 2 <sup>nd</sup> sample | Identification Method |
| Achyranthes bidentata (牛膝)  | 150                         | 120                         | HPTLC or TLC          |
| Acorus tatarinowii (石菖蒲)  | 150                         | 120                         | HPTLC or TLC          |
| Aloe barbadensis (库拉索芦荟)  | 150                         | 120                         | HPTLC or TLC          |
| Alpinia galanga (大高良姜)  | 150                         | 120                         | HPTLC or TLC          |
| Alpinia katsumadai (草豆蔻)  | 150                         | 120                         | HPTLC or TLC          |
| Amomum kravanh (白豆蔻)  | 150                         | 120                         | HPTLC or TLC          |
| Amomum tsao-ko (草果)   | 150                         | 120                         | HPTLC or TLC          |
| Amomum villosum (阳春砂)   | 150                         | 120                         | HPTLC or TLC          |
| Andrographis paniculata (穿心莲)   | 150                         | 120                         | HPTLC or TLC          |
| Anemarrhena asphodeloides (知母)  | 150                         | 120                         | HPTLC or TLC          |
| Angelica dahurica (白芷)  | 150                         | 120                         | HPTLC or TLC          |
| Angelica pubescens (毛当归)  | 150                         | 120                         | HPTLC or TLC          |
| Arctium lappa (牛蒡)  | 150                         | 120                         | HPTLC or TLC          |
| Areca catechu (槟榔)  | 150                         | 120                         | HPTLC or TLC          |
| Aristolochia contorta (北马兜铃)  | 150                         | 120                         | HPTLC or TLC          |
| Aristolochia debilis (马兜铃)  | 150                         | 120                         | HPTLC or TLC          |
| Arnebia euchroma (紫草)   | 150                         | 120                         | HPTLC or TLC          |
| Artemisia annua (黄花蒿)   | 150                         | 120                         | HPTLC or TLC          |
| Astragalus membranaceus (黄芪)  | 150                         | 120                         | HPTLC or TLC          |
| Aster tataricus (紫菀)  | 150                         | 120                         | HPTLC or TLC          |
| Atractylodes chinensis (北苍术)  | 150                         | 120                         | HPTLC or TLC          |
| Atractylodes macrocephala (白术)  | 150                         | 120                         | HPTLC or TLC          |
| Atropa belladonna (颠茄)  | 150                         | 120                         | HPTLC or TLC          |
| Aucklandia lappa (木香)   | 150                         | 120                         | HPTLC or TLC          |
| Baphicacanthus cusia (马兰)   | 150                         | 120                         | HPTLC or TLC          |

| Identification of Traditional Chinese Medicines (TCMs) by HPTLC or TLC Method |                             |                             |                       |
|---|-----------------------------|-----------------------------|-----------------------|
| Latin Name (Chinese Name)   | Cost 1 <sup>st</sup> sample | Cost 2 <sup>nd</sup> sample | Identification Method |
| Belamcanda chinensis (射干)   | 150                         | 120                         | HPTLC or TLC          |
| Bolbostemma paniculatum (土贝母)   | 150                         | 120                         | HPTLC or TLC          |
| Bupleurum chinense (柴胡)   | 150                         | 120                         | HPTLC or TLC          |
| Cannabis sativa (大麻)  | 150                         | 120                         | HPTLC or TLC          |
| Carthamus tinctorius (红花)   | 150                         | 120                         | HPTLC or TLC          |
| Cassia angustifolia (狭叶番泻叶)   | 150                         | 120                         | HPTLC or TLC          |
| Cassia obtusifolia (决明子)  | 150                         | 120                         | HPTLC or TLC          |
| Chrysanthemum morifolium (菊花)   | 150                         | 120                         | HPTLC or TLC          |
| Cimicifuga foetida (升麻)   | 150                         | 120                         | HPTLC or TLC          |
| Cinnamomum cassia (肉桂)  | 150                         | 120                         | HPTLC or TLC          |
| Cistanche deserticola (肉苁蓉)   | 150                         | 120                         | HPTLC or TLC          |
| Citrus aurantium (酸橙)   | 150                         | 120                         | HPTLC or TLC          |
| Citrus grandis (柚)  | 150                         | 120                         | HPTLC or TLC          |
| Citrus medica (枸橼)  | 150                         | 120                         | HPTLC or TLC          |
| Citrus reticulata (温州蜜柑)  | 150                         | 120                         | HPTLC or TLC          |
| Clematis armandii (小木通)   | 150                         | 120                         | HPTLC or TLC          |
| Clinopodium chinense (风轮菜)  | 150                         | 120                         | HPTLC or TLC          |
| Cnidium monnieri (蛇床子)  | 150                         | 120                         | HPTLC or TLC          |
| Coptis chinensis (黄连)   | 150                         | 120                         | HPTLC or TLC          |
| Corydalis decumbens (伏生紫堇)  | 150                         | 120                         | HPTLC or TLC          |
| Corydalis yanhusuo (延胡索)  | 150                         | 120                         | HPTLC or TLC          |
| Crataegus pinnatifida (山里红)   | 150                         | 120                         | HPTLC or TLC          |
| Curculigo orchoides (仙茅)  | 150                         | 120                         | HPTLC or TLC          |
| Curcuma wenyujin (温郁金)  | 150                         | 120                         | HPTLC or TLC          |
| Cynanchum paniculatum (徐长卿)   | 150                         | 120                         | HPTLC or TLC          |
| Cynomorium songaricum (锁阳)  | 150                         | 120                         | HPTLC or TLC          |
| Daphne genkwa (芫花)  | 150                         | 120                         | HPTLC or TLC          |
| Datura metel (白花曼陀罗)  | 150                         | 120                         | HPTLC or TLC          |
| Dictamnus dasycarpus (白鲜)   | 150                         | 120                         | HPTLC or TLC          |
| Dipsacus asperoides (川续断)   | 150                         | 120                         | HPTLC or TLC          |
| Drynaria fortunei (槲蕨)  | 150                         | 120                         | HPTLC or TLC          |
| Dryopteris crassirhizoma (粗茎鳞毛蕨)  | 150                         | 120                         | HPTLC or TLC          |
| Eucalyptus globules (蓝桉)  | 150                         | 120                         | HPTLC or TLC          |
| Ephedra sinica (麻黄)   | 150                         | 120                         | HPTLC or TLC          |
| Epimedium brevicornum (淫羊藿)   | 150                         | 120                         | HPTLC or TLC          |
| Eugenia caryophyllata (丁香)  | 150                         | 120                         | HPTLC or TLC          |
| Eupatorium fortunei (佩兰)  | 150                         | 120                         | HPTLC or TLC          |
| Euphorbia lathyris (续随子)  | 150                         | 120                         | HPTLC or TLC          |
| Foeniculum vulgare (茴香)   | 150                         | 120                         | HPTLC or TLC          |
| Forsythia suspense (连翘)   | 150                         | 120                         | HPTLC or TLC          |
| Fraxinus rhynchophylla (苦枥白蜡树)  | 150                         | 120                         | HPTLC or TLC          |
| Fritillaria hupehensis (湖北贝母)   | 150                         | 120                         | HPTLC or TLC          |
| Fritillaria thunbergii (浙贝母)  | 150                         | 120                         | HPTLC or TLC          |
| Fritillaria ussuriensis (平贝母)   | 150                         | 120                         | HPTLC or TLC          |
| Fritillaria walujewii (新疆贝母)  | 150                         | 120                         | HPTLC or TLC          |
| Ganoderma lucidum (赤芝)  | 150                         | 120                         | HPTLC or TLC          |
| Gardenia jasminoides (梔子)   | 150                         | 120                         | HPTLC or TLC          |
| Gastrodia elata (天麻)  | 150                         | 120                         | HPTLC or TLC          |
| Gentiana scabra (龙胆)  | 150                         | 120                         | HPTLC or TLC          |

| Identification of Traditional Chinese Medicines (TCMs) by HPTLC or TLC Method |                             |                             |                       |
|---|-----------------------------|-----------------------------|-----------------------|
| Latin Name (Chinese Name)   | Cost 1 <sup>st</sup> sample | Cost 2 <sup>nd</sup> sample | Identification Method |
| Ginkgo biloba (银杏)  | 150                         | 120                         | HPTLC or TLC          |
| Glycyrrhiza uralensis (甘草)  | 150                         | 120                         | HPTLC or TLC          |
| Hyoscyamus niger (莨菪)   | 150                         | 120                         | HPTLC or TLC          |
| Illicium verum (八角茴香)   | 150                         | 120                         | HPTLC or TLC          |
| Inula japonica (旋复花)  | 150                         | 120                         | HPTLC or TLC          |
| Isatis indigotica (菘蓝)  | 150                         | 120                         | HPTLC or TLC          |
| Kaempferia galangal (山奈)  | 150                         | 120                         | HPTLC or TLC          |
| Knoxia valerianoides (红大戟)  | 150                         | 120                         | HPTLC or TLC          |
| Kochia scoparia (地肤子)   | 150                         | 120                         | HPTLC or TLC          |
| Leonurus japonica (益母草)   | 150                         | 120                         | HPTLC or TLC          |
| Ligusticum sinense (篙本)   | 150                         | 120                         | HPTLC or TLC          |
| Ligustrum lucidus (女贞子)   | 150                         | 120                         | HPTLC or TLC          |
| Lindera aggregate (乌药)  | 150                         | 120                         | HPTLC or TLC          |
| Liquidambar orientalis (苏合香树)   | 150                         | 120                         | HPTLC or TLC          |
| Lonicera japonica (忍冬)  | 150                         | 120                         | HPTLC or TLC          |
| Lycium barbarum (宁夏枸杞)  | 150                         | 120                         | HPTLC or TLC          |
| Mahonia bealei (十大功劳)   | 150                         | 120                         | HPTLC or TLC          |
| Magnolia officinalis (厚朴)   | 150                         | 120                         | HPTLC or TLC          |
| Melia toosendan (川楝)  | 150                         | 120                         | HPTLC or TLC          |
| Mentha haplocalyx (薄荷)  | 150                         | 120                         | HPTLC or TLC          |
| Myristica fragrans (肉豆蔻)  | 150                         | 120                         | HPTLC or TLC          |
| Oroxylum indicum (木蝴蝶)  | 150                         | 120                         | HPTLC or TLC          |
| Paeonia lactiflora (芍药)   | 150                         | 120                         | HPTLC or TLC          |
| Paeonia suffruticosa (牡丹)   | 150                         | 120                         | HPTLC or TLC          |
| Panax ginseng (人参)  | 150                         | 120                         | HPTLC or TLC          |
| Panax notoginseng (三七)  | 150                         | 120                         | HPTLC or TLC          |
| Panax quinquefolium (西洋参)   | 150                         | 120                         | HPTLC or TLC          |
| Panax japonicum (竹节参)   | 150                         | 120                         | HPTLC or TLC          |
| Papaver somniferum (罂粟)   | 150                         | 120                         | HPTLC or TLC          |
| Perilla frutescens (紫苏)   | 150                         | 120                         | HPTLC or TLC          |
| Pharbitis nil (裂叶牵牛)  | 150                         | 120                         | HPTLC or TLC          |
| Phellodendron chinense (黄皮树)  | 150                         | 120                         | HPTLC or TLC          |
| Physochlaina infundibularis (漏斗泡囊草)   | 150                         | 120                         | HPTLC or TLC          |
| Picrasma quassioides (苦木)   | 150                         | 120                         | HPTLC or TLC          |
| Picrorhiza scrophulariiflora (胡黄连)  | 150                         | 120                         | HPTLC or TLC          |
| Pinellia ternate (半夏)   | 150                         | 120                         | HPTLC or TLC          |
| Piper longum (荜菪)   | 150                         | 120                         | HPTLC or TLC          |
| Piper nigrum (胡椒)   | 150                         | 120                         | HPTLC or TLC          |
| Platycodon grandiflorus (桔梗)  | 150                         | 120                         | HPTLC or TLC          |
| Pogostemon cablin (广藿香)   | 150                         | 120                         | HPTLC or TLC          |
| Polygala tenuifolia (远志)  | 150                         | 120                         | HPTLC or TLC          |
| Polygonum aviculare ()  | 150                         | 120                         | HPTLC or TLC          |
| Polygonum cuspidatum (虎杖)   | 150                         | 120                         | HPTLC or TLC          |
| Polygonum multiflorum (何首乌)   | 150                         | 120                         | HPTLC or TLC          |
| Prunella vulgaris (夏枯草)   | 150                         | 120                         | HPTLC or TLC          |
| Prunus armeniaca (杏)  | 150                         | 120                         | HPTLC or TLC          |
| Pseudostellaria heterophylla (孩儿参)  | 150                         | 120                         | HPTLC or TLC          |
| Psoralea corylifolia (补骨脂)  | 150                         | 120                         | HPTLC or TLC          |
| Pueraria lobata (野葛)  | 150                         | 120                         | HPTLC or TLC          |

| Identification of Traditional Chinese Medicines (TCMs) by HPTLC or TLC Method |                                |                                |                          |
|---|--------------------------------|--------------------------------|--------------------------|
| Latin Name (Chinese Name)   | Cost<br>1 <sup>st</sup> sample | Cost<br>2 <sup>nd</sup> sample | Identification<br>Method |
| Rehmannia glutinosa (地黄)  | 150                            | 120                            | HPTLC or TLC             |
| Rhaponticum uniflorum (祁州漏芦)  | 150                            | 120                            | HPTLC or TLC             |
| Rhododendron dauricum (兴安杜鹃)  | 150                            | 120                            | HPTLC or TLC             |
| Rheum palmatum (大黄)   | 150                            | 120                            | HPTLC or TLC             |
| Rubia cordifolia (茜草)   | 150                            | 120                            | HPTLC or TLC             |
| Salvia miltiorrhiza (丹参)  | 150                            | 120                            | HPTLC or TLC             |
| Santalum album (檀香)   | 150                            | 120                            | HPTLC or TLC             |
| Saposhnikovia divaricata (防风)   | 150                            | 120                            | HPTLC or TLC             |
| Schisandra chinensis (五味子)  | 150                            | 120                            | HPTLC or TLC             |
| Scrophularia ningpoensis (玄参)   | 150                            | 120                            | HPTLC or TLC             |
| Scutellaria baicalensis (黄芩)  | 150                            | 120                            | HPTLC or TLC             |
| Sesamum indicum (脂麻)  | 150                            | 120                            | HPTLC or TLC             |
| Sinomenium acutum (青藤)  | 150                            | 120                            | HPTLC or TLC             |
| Sophora tonkinensis (越南槐)   | 150                            | 120                            | HPTLC or TLC             |
| Sophora flavescens (苦参)   | 150                            | 120                            | HPTLC or TLC             |
| Sophora japonica (槐花)   | 150                            | 120                            | HPTLC or TLC             |
| Stephania tetradra (粉防己)  | 150                            | 120                            | HPTLC or TLC             |
| Strychnos nux-vomica (马钱)   | 150                            | 120                            | HPTLC or TLC             |
| Swertia mileensis (青叶胆)   | 150                            | 120                            | HPTLC or TLC             |
| Taraxacum mongolicum (蒲公英)  | 150                            | 120                            | HPTLC or TLC             |
| Taxillus chinensis (桑寄生)  | 150                            | 120                            | HPTLC or TLC             |
| Tinospora sagittata (青牛胆)   | 150                            | 120                            | HPTLC or TLC             |
| Trichosanthes kirilowii (瓜蒌)  | 150                            | 120                            | HPTLC or TLC             |
| Trigonella foenum-graecum   | 150                            | 120                            | HPTLC or TLC             |
| Typha angustifolia (水烛香蒲)   | 150                            | 120                            | HPTLC or TLC             |
| Vaccaria segetalis (麦蓝菜)  | 150                            | 120                            | HPTLC or TLC             |
| Verbena officinalis (马鞭草)   | 150                            | 120                            | HPTLC or TLC             |
| Vladimiria souliei (川木香)  | 150                            | 120                            | HPTLC or TLC             |
| Viscum coloratum (槲寄生)  | 150                            | 120                            | HPTLC or TLC             |
| Vitex trifolia (蔓荆)   | 150                            | 120                            | HPTLC or TLC             |
| Zanthoxylum bungeanum (花椒)  | 150                            | 120                            | HPTLC or TLC             |
| Zanthoxylum nitidum (两面针)   | 150                            | 120                            | HPTLC or TLC             |
| Zingiber officinale (姜)   | 150                            | 120                            | HPTLC or TLC             |
| Ziziphus jujube (酸枣仁)   | 150                            | 120                            | HPTLC or TLC             |

**Identification of some herbs by HPTLC or TLC Method**

| Latin Name               | Cost<br>1 <sup>st</sup> sample | Cost<br>2 <sup>nd</sup> sample | Identification<br>Method |
|--------------------------|--------------------------------|--------------------------------|--------------------------|
| Aloe vera                | 150                            | 120                            | HPTLC or TLC             |
| Artichoke ext.           | 150                            | 120                            | HPTLC or TLC             |
| Astragalus               | 150                            | 120                            | HPTLC or TLC             |
| Cactus ext.              | 150                            | 120                            | HPTLC or TLC             |
| Cape aloe                | 150                            | 120                            | HPTLC or TLC             |
| Comfrey leaves and roots | 150                            | 120                            | HPTLC or TLC             |
| Exocarpium citri         | 150                            | 120                            | HPTLC or TLC             |
| Goji berries ext.        | 150                            | 120                            | HPTLC or TLC             |
| Goldthread root ext.     | 150                            | 120                            | HPTLC or TLC             |
| King khan ext.           | 150                            | 120                            | HPTLC or TLC             |
| Lycium barbarum ext.     | 150                            | 120                            | HPTLC or TLC             |
| Maca ext.                | 150                            | 120                            | HPTLC or TLC             |
| Muirea puama ext.        | 150                            | 120                            | HPTLC or TLC             |

| Identification of Traditional Chinese Medicines (TCMs) by HPTLC or TLC Method |                                |                                |                          |
|---|--------------------------------|--------------------------------|--------------------------|
| Latin Name (Chinese Name)   | Cost<br>1 <sup>st</sup> sample | Cost<br>2 <sup>nd</sup> sample | Identification<br>Method |
| Nettle root ext.  | 150                            | 120                            | HPTLC or TLC             |
| Noni ext.   | 150                            | 120                            | HPTLC or TLC             |
| Pau D'Acro ext.   | 150                            | 120                            | HPTLC or TLC             |
| Phosphatides  | 150                            | 120                            | HPTLC or TLC             |
| Pichroriza kurroa ext.  | 150                            | 120                            | HPTLC or TLC             |
| Pumkin seeds ext.   | 150                            | 120                            | HPTLC or TLC             |
| Rhubarb root ext.   | 150                            | 120                            | HPTLC or TLC             |
| Sesame seed oil   | 150                            | 120                            | HPTLC or TLC             |
| Wormwood ext.   | 150                            | 120                            | HPTLC or TLC             |

**Analysis of Ingredients in Natural products by UV method**

| Sample                    | Ingredient                        | Cost<br>1 <sup>st</sup> sample | Cost<br>2 <sup>nd</sup> sample | Assay<br>Method |
|---------------------------|-----------------------------------|--------------------------------|--------------------------------|-----------------|
| Beef Root                 | Androcyanonid                     | \$150                          | \$120                          | UV-VIS          |
| Bee Propolis              | Total Flavonoids                  | \$150                          | \$120                          | UV-VIS          |
| Bilberry                  | Anthocyanidins, quantitation      | \$150                          | \$120                          | UV-VIS          |
| Buckthorn                 | Flavonoids                        | \$150                          | \$120                          | UV-Vis          |
| Butcher's Broom           | Ruscogenins                       | \$150                          | \$120                          | UV-Vis          |
| Elder Berry               | Anthocyanidin                     | \$150                          | \$120                          | UV-Vis          |
| Ginseng (Asian, American) | Total Ginsenosides, quantitation  | \$150                          | \$120                          | UV-Vis          |
| Grape Seed                | Proanthocyanidins by Porter Value | \$150                          | \$120                          | UV-Vis          |
| Grape Seed                | Polyphenol by Folin – Ciocalteu   | \$150                          | \$120                          | UV-Vis          |
| Green Tea                 | Polyphenol by Folin-Ciocalteu     | \$150                          | \$120                          | UV-Vis          |
| Licorice                  | Licorice Isoflavones              | \$150                          | \$120                          | UV-Vis          |
| Milk Thistle              | Silymarin                         | \$150                          | \$120                          | UV-Vis          |
| Pine Bark                 | Pycnogenol by Folin-Ciocalteu     | \$150                          | \$120                          | UV-Vis          |
| Senna                     | Sennosides                        | \$150                          | \$120                          | UV              |
| St. John's Wort           | Total Dianthornes as Hypericins   | \$150                          | \$120                          | UV              |
| Turmeric                  | Curcumin                          | \$150                          | \$120                          | UV-Vis          |
| Tribulus                  | Total saponins                    | \$150                          | \$120                          | UV-vis          |
| Terrestris                |                                   |                                |                                |                 |

**Analysis of Chemical Compositions in Natural Products by UV method**

| Sample                | Cost<br>1 <sup>st</sup> sample | Cost<br>2 <sup>nd</sup> sample | Assay<br>Method |
|-----------------------|--------------------------------|--------------------------------|-----------------|
| Total Flavonoids      | \$150                          | \$120                          | UV-Vis          |
| Total Polysaccharides | \$150                          | \$120                          | UV-Vis          |
| Total Proteins        | \$150                          | \$120                          | UV-Vis          |
| Total Saponins        | \$150                          | \$120                          | UV-Vis          |
| Total Tannins         | \$150                          | \$120                          | UV-Vis          |

**Analysis of Nutraceuticals, Pharmaceuticals and Additives by HPLC Methods**

| Sample               | Cost<br>1 <sup>st</sup> sample | Cost<br>2 <sup>nd</sup> sample | Assay<br>Method |
|----------------------|--------------------------------|--------------------------------|-----------------|
| Acesulfame K         | \$200                          | \$180                          | HPLC            |
| acetaminophen        | \$200                          | \$180                          | HPLC            |
| Acetyl-L-Carnitine   | \$200                          | \$180                          | HPLC            |
| Acetyl-L-Cysteine    | \$200                          | \$180                          | HPLC            |
| Acetyl-Glucosamine   | \$200                          | \$180                          | HPLC            |
| Allantoinin          | \$200                          | \$180                          | HPLC            |
| Androsterondione     | \$200                          | \$180                          | HPLC            |
| Aspartame            | \$200                          | \$180                          | HPLC            |
| Asp-Phe methyl ester | \$200                          | \$180                          | HPLC            |

| Analysis of Nutraceuticals, Pharmaceuticals and Additives by HPLC Methods |                                |                                |                 |
|---|--------------------------------|--------------------------------|-----------------|
| Sample  | Cost<br>1 <sup>st</sup> sample | Cost<br>2 <sup>nd</sup> sample | Assay<br>Method |
| Benzalkonium Chloride   | \$200                          | \$180                          | HPLC            |
| Benzoic acid  | \$200                          | \$180                          | HPLC            |
| Betaine   | \$200                          | \$180                          | HPLC            |
| betalin   | \$200                          | \$180                          | HPLC            |
| boldine   | \$200                          | \$180                          | HPLC            |
| Caffeine  | \$200                          | \$180                          | HPLC            |
| Natural Carotenoids (up to 12 markers)                                    | \$200                          | \$180                          | HPLC            |
| L-Carnitine   | \$200                          | \$180                          | HPLC            |
| carnosine   | \$200                          | \$180                          | HPLC            |
| D-Chiro-Inositol  | \$200                          | \$180                          | HPLC            |
| Red Rice Yeast (Cholestin or lovastatin)                                  | \$200                          | \$180                          | HPLC            |
| Chloramphenical   | \$200                          | \$180                          | HPLC            |
| Chlorpheniramin   | \$200                          | \$180                          | HPLC            |
| Citric acid   | \$200                          | \$180                          | HPLC            |
| CoEnzyme 10   | \$200                          | \$180                          | HPLC            |
| Calcium HMB (Hydroxymethylbutanate)                                       | \$200                          | \$180                          | HPLC            |
| Chlorogenic Acid  | \$200                          | \$180                          | HPLC            |
| Chondroitin   | \$200                          | \$180                          | HPLC            |
| Choline   | \$200                          | \$180                          | HPLC            |
| Clenbuterol   | \$200                          | \$180                          | HPLC            |
| Colostrum   | \$200                          | \$180                          | HPLC            |
| Creatine  | \$200                          | \$180                          | HPLC            |
| DHEA  | \$200                          | \$180                          | HPLC            |
| DMAE (Dimethylaminoethanol)   | \$200                          | \$180                          | HPLC            |
| Di-Chlorophen   | \$200                          | \$180                          | HPLC            |
| Dimethyl Glycine  | \$200                          | \$180                          | HPLC            |
| Diosmin   | \$200                          | \$180                          | HPLC            |
| DMSA (Meso-2,3-Dimercapto succinic acid)                                  | \$200                          | \$180                          | HPLC            |
| Docusate sodium   | \$200                          | \$180                          | HPLC            |
| L-Dopa  | \$200                          | \$180                          | HPLC            |
| Ebselen   | \$200                          | \$180                          | HPLC            |
| Ecdysterone   | \$200                          | \$180                          | HPLC            |
| Fisetin   | \$200                          | \$180                          | HPLC            |
| Formonetin  | \$200                          | \$180                          | HPLC            |
| Fructose  | \$200                          | \$180                          | HPLC            |
| GABA  | \$200                          | \$180                          | HPLC            |
| Gallic Acid   | \$200                          | \$180                          | HPLC            |
| Glucosamine   | \$200                          | \$180                          | HPLC            |
| Glucose   | \$200                          | \$180                          | HPLC            |
| Glutathione   | \$200                          | \$180                          | HPLC            |
| Huperzine A   | \$200                          | \$180                          | HPLC            |
| Hyaluronic Acid   | \$200                          | \$180                          | HPLC            |
| Hyaluronic Acid (enzymatic)   | \$200                          | \$180                          | HPLC            |
| Hydroquinone  | \$200                          | \$180                          | HPLC            |
| 5-HTP (5-Hydroxytryptophan)   | \$200                          | \$180                          | HPLC            |
| Indiole-3-carbinol  | \$200                          | \$180                          | HPLC            |
| Inositol  | \$200                          | \$180                          | HPLC            |
| $\alpha$ -Ketoglutarate   | \$200                          | \$180                          | HPLC            |
| Lactic acid   | \$200                          | \$180                          | HPLC            |
| Lactium   | \$200                          | \$180                          | HPLC            |
| Lecithin (phosphatidylchloine)  | \$200                          | \$180                          | HPLC            |
| Lutein/Zeaxanthin   | \$200                          | \$180                          | HPLC            |
| $\alpha$ -Lipoic acid   | \$200                          | \$180                          | HPLC            |
| Lycopene  | \$200                          | \$180                          | HPLC            |
| Mannitol  | \$200                          | \$180                          | HPLC            |

| Analysis of Nutraceuticals, Pharmaceuticals and Additives by HPLC Methods                         |                                |                                |                 |
|---|--------------------------------|--------------------------------|-----------------|
| Sample  | Cost<br>1 <sup>st</sup> sample | Cost<br>2 <sup>nd</sup> sample | Assay<br>Method |
| Melatonin   | \$200                          | \$180                          | HPLC            |
| Methylnicotinate  | \$200                          | \$180                          | HPLC            |
| 5-Methyl-7-Methoxy Isoflavones  | \$200                          | \$180                          | HPLC            |
| Nobiletin   | \$200                          | \$180                          | HPLC            |
| Naringin  | \$200                          | \$180                          | HPLC            |
| N,N-Dimethylglycine   | \$200                          | \$180                          | HPLC            |
| Paraben, methyl   | \$200                          | \$180                          | HPLC            |
| Paraben, Propyl   | \$200                          | \$180                          | HPLC            |
| Phloridzin  | \$200                          | \$180                          | HPLC            |
| Calcium Pyruvate (pyruvic Acid)   | \$200                          | \$180                          | HPLC            |
| Phytosterols  | \$200                          | \$180                          | HPLC            |
| Prednisolone  | \$200                          | \$180                          | HPLC            |
| Pregnenolone  | \$200                          | \$180                          | HPLC            |
| Pyroglutamic Acid   | \$200                          | \$180                          | HPLC            |
| Quercetin   | \$200                          | \$180                          | HPLC            |
| Quinic acid   | \$200                          | \$180                          | HPLC            |
| Resveratrol   | \$200                          | \$180                          | HPLC            |
| D-Ribose  | \$200                          | \$180                          | HPLC            |
| Rutin   | \$200                          | \$180                          | HPLC            |
| SAM-e   | \$200                          | \$180                          | HPLC            |
| Salicylre Acid  | \$200                          | \$180                          | HPLC            |
| Serotonin   | \$200                          | \$180                          | HPLC            |
| Sorbic acid   | \$200                          | \$180                          | HPLC            |
| Sucrose   | \$200                          | \$180                          | HPLC            |
| Tartaric Acid   | \$200                          | \$180                          | HPLC            |
| Theobromine   | \$200                          | \$180                          | HPLC            |
| Threonic acid   | \$200                          | \$180                          | HPLC            |
| Tigogenin   | \$200                          | \$180                          | HPLC            |
| Tocotrienol ( $\alpha$ -, $\delta$ -, $\gamma$ -tocotrienol and $\alpha$ -, $\delta$ -tocopherol) | \$200                          | \$180                          | HPLC            |
| Tri-ethanolamine  | \$200                          | \$180                          | HPLC            |
| Viagra, cialis, levitra   | \$400                          | \$300                          | HPLC            |
| Vinpocetin  | \$200                          | \$180                          | HPLC            |

**The Analysis of Vitamins by HPLC Method**

| <b>Vitamin – (All tested by HPLC)</b> | <b>Cost<br/>1<sup>st</sup><br/>sample</b> | <b>Cost<br/>2<sup>nd</sup><br/>sample</b> | <b>Method</b> |
|---------------------------------------|---|---|---------------|
| Beta-carotene                         | \$120                                     | \$100                                     | HPLC          |
| Biotin                                | \$120                                     | \$100                                     | HPLC          |
| Folic Acid                            | \$120                                     | \$100                                     | HPLC          |
| Vitamin A (Retinol)                   | \$120                                     | \$100                                     | HPLC          |
| Vitamin A (Acetate)                   | \$120                                     | \$100                                     | HPLC          |
| Vitamin A (Palmitate)                 | \$120                                     | \$100                                     | HPLC          |
| Vitamin B1 (Thiamin Mononitrate)      | \$120                                     | \$100                                     | HPLC          |
| Vitamin B2 (Riboflavin)               | \$120                                     | \$100                                     | HPLC          |
| Vitamin B3 (Niacin/Niacinamide)       | \$120                                     | \$100                                     | HPLC          |
| Vitamin B5 (D-Calcium Pantothenate)   | \$120                                     | \$100                                     | HPLC          |
| Vitamin B6 (Pyridoxine)               | \$120                                     | \$100                                     | HPLC          |
| Vitamin B12 (Cyanocobalamin)          | \$120                                     | \$100                                     | HPLC          |
| Vitamin C (Ascorbic Acid)             | \$120                                     | \$100                                     | HPLC          |
| Vitamin D2 (Ergocalciferol)           | \$120                                     | \$100                                     | HPLC          |
| Vitamin D3 (Cholecalciferol)          | \$120                                     | \$100                                     | HPLC          |
| Vitamin E (Tocopherol)                | \$120                                     | \$100                                     | HPLC          |
| Vitamin E (Acetate)                   | \$120                                     | \$100                                     | HPLC          |
| Vitamin E (Succinate)                 | \$120                                     | \$100                                     | HPLC          |
| Vitamin K1 (Phylloquinones)           | \$120                                     | \$100                                     | HPLC          |
| Vitamin K2 (Menaquinones)             | \$120                                     | \$100                                     | HPLC          |
| Vitamin K3 (Menadione)                | \$120                                     | \$100                                     | HPLC          |

**The Analysis of Amino Acids by HPLC Method**

| <b>Amino Acid</b> | <b>Cost<br/>1<sup>st</sup><br/>sample</b> | <b>Cost<br/>2<sup>nd</sup><br/>sample</b> | <b>Method</b>   |
|-------------------|---|---|-----------------|
| Alanine           | \$120                                     | \$100                                     | Derivative-HPLC |
| Arginine          | \$120                                     | \$100                                     | Derivative-HPLC |
| Aspartic Acid     | \$120                                     | \$100                                     | Derivative-HPLC |
| Cystine           | \$120                                     | \$100                                     | Derivative-HPLC |
| Glutamic Acid     | \$120                                     | \$100                                     | Derivative-HPLC |
| Glycine           | \$120                                     | \$100                                     | Derivative-HPLC |
| Histidine         | \$120                                     | \$100                                     | Derivative-HPLC |
| Isoleucine        | \$120                                     | \$100                                     | Derivative-HPLC |
| Leucine           | \$120                                     | \$100                                     | Derivative-HPLC |
| Lysine            | \$120                                     | \$100                                     | Derivative-HPLC |
| Methionine        | \$120                                     | \$100                                     | Derivative-HPLC |
| Phenylalanine     | \$120                                     | \$100                                     | Derivative-HPLC |
| Proline           | \$120                                     | \$100                                     | Derivative-HPLC |
| Serine            | \$120                                     | \$100                                     | Derivative-HPLC |
| Taurine           | \$120                                     | \$100                                     | Derivative-HPLC |
| Threonine         | \$120                                     | \$100                                     | Derivative-HPLC |
| Tryptophan        | \$120                                     | \$100                                     | Derivative-HPLC |
| Tyrosin           | \$120                                     | \$100                                     | Derivative-HPLC |
| Valine            | \$120                                     | \$100                                     | Derivative-HPLC |
| L-Theanine        | \$120                                     | \$100                                     | HPLC            |