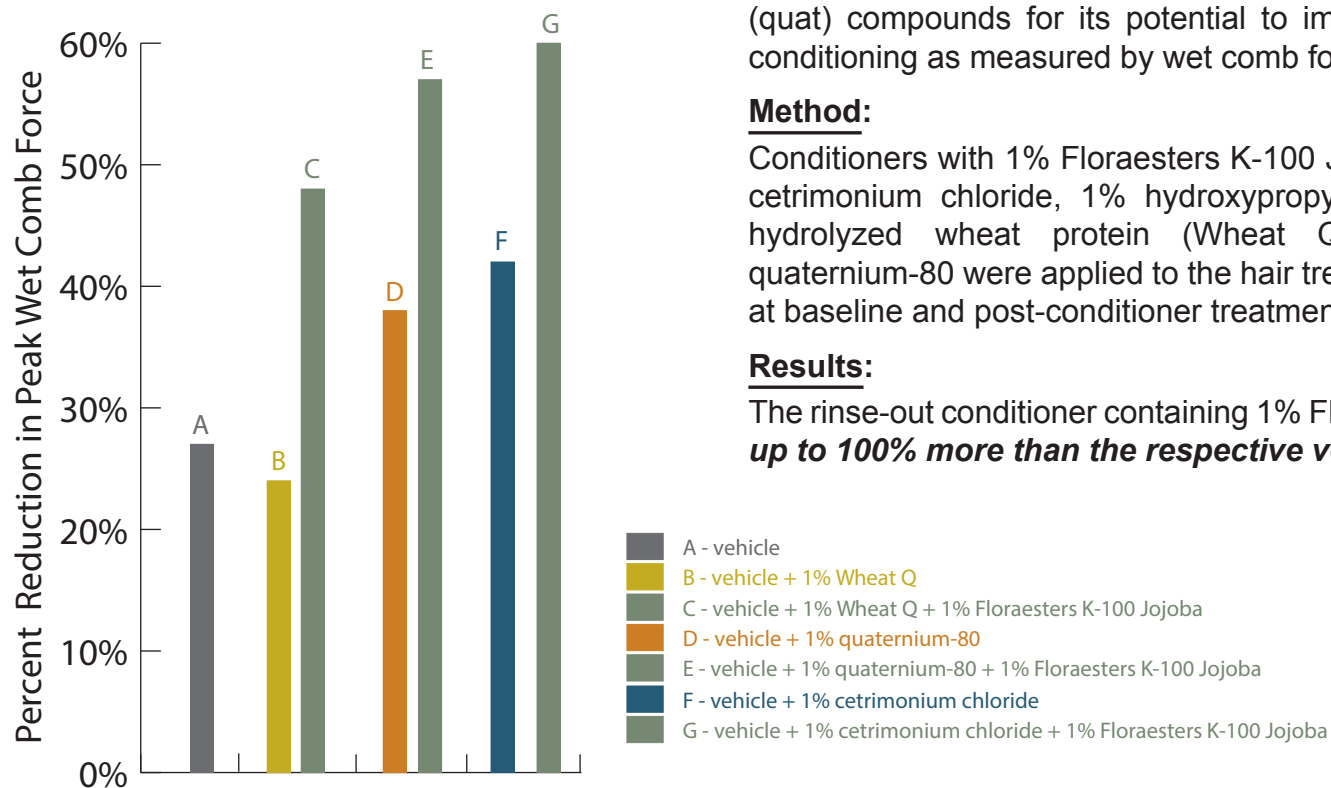




## Floraesters K-100 Jojoba in a Rinse-Out Conditioner Enhanced the Conditioning Effect of Quaternium Compounds

### Reduction in Wet Comb Force



### Objective:

To evaluate Floraesters K-100 Jojoba in a rinse-out hair conditioner that contains quaternium (quat) compounds for its potential to improve hair conditioning as measured by wet comb force.

### Method:

Conditioners with 1% Floraesters K-100 Jojoba, 1% cetrimonium chloride, 1% hydroxypropyltrimonium hydrolyzed wheat protein (Wheat Q), and/or quaternium-80 were applied to the hair tresses. Wet comb force measurements were taken at baseline and post-conditioner treatment.

### Results:

The rinse-out conditioner containing 1% Floraesters K-100 Jojoba **reduced wet comb force up to 100% more than the respective vehicle + quat conditioner.**



Vehicle Conditioner (%wt/wt): Water (q.s.), Glyceryl Stearate (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate (4.0%), Cetyl Alcohol (3.0%), Propanediol (1.0%), Polyglyceryl-2 Stearate (1.0%), Ethylhexyl Methoxycinnamate (and) BHT (1.0%), Moringa Oil/Hydrogenated Moringa Oil Esters (1.0%), Macadamia Integrifolia Seed Oil (1.0%), Ethyl Macadamiate (1.0%), Phenoxyethanol (and) Decylene Glycol (and) Propylene Glycol (0.8%), Fragrance (0.5%), Tocopheryl Acetate (0.5%), Niacinamide (0.3%), Hydroxyethylcellulose (0.1%), Disodium EDTA (0.1%), Pyridoxine Hydrochloride (0.1%), and Citric Acid (0.1%).

## Floratech Ingredient: Floraesters K-100 Jojoba

The *ex vivo* study of Floratech® test formulation (CTL\_15-060) was conducted on naturally curly, dark brown, six inch long hair tresses (DeMeo Brothers Inc.) that were damaged via double-bleaching and then washed with a 10% sodium lauryl sulfate solution prior to use in the study (n=8 tresses per test article). Treatment consisted of a 30 second rinse, one application of 1 ml of the conditioner test article per 1.5 g of hair, a 30 second rub, and another 30 second rinse. Peak comb force (gram-force) measurements were made using a Test Resources Q Series (100Q) Universal Testing Machine (TestResources, Inc.). This study was double-blind and randomized. The inclusion of Floraesters K-100 Jojoba resulted in statistically significant (p<0.05) reductions in wet comb force compared to each respective test article without and compared to baseline. Wheat Q (INCI: hydroxypropyltrimonium hydrolyzed wheat protein) was supplied by Brenntag Specialties, Inc. (Clinical Study 15-060 - Phase V report available upon request.)