```
decidable__l_member  THM

⊢  ∀A:Type, x:A. (∀x,y:A. Dec(x = y)) ⇒ (∀L:A List. Dec((x ∈ L)))
  by InductionOnList
     THEN
     Try
     (RWO
      Thm* ∀l:T List, a,x:T. (x ∈ [a / l]) ⟺ x = a ∨ (x ∈ l)
      {cons_member}
      0)
     THEN
     Try (RWO Thm* ∀x:T. (x ∈ nil) ⟺ False    {nil_member} 0)
END
```